

APPENDIX B

AGENCY CORRESPONDENCE



Preserving America's Heritage

February 5, 2014

Scott C. McLendon Chief, Regulatory Division Wilmington District, Corps of Engineers 69 Darlington Avenue Wilmington, NC 28403-1343

Ref: Proposed Construction of the SR 1409 Extension and the US 17 Hampstead Bypass

New Hanover and Pender Counties, North Carolina

Project Numbers U-4751 & R-3300

Dear Mr. McLendon:

The Advisory Council on Historic Preservation (ACHP) has received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and it is determined that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the North Carolina State Historic Preservation Office (SHPO), and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA, and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with the notification of adverse effect. If you have any questions or require further assistance, please contact Anthony Guy Lopez at 202-606-8525 or at alopez@achp.gov.

Sincerely,

LaShavio Johnson

Historic Preservation Technician Office of Federal Agency Programs

Ca Shavio Johnson



United States Department of Agriculture Natural Resources Conservation Service 4407 Bland Road, Suite 117 Raleigh, NC 27609 (919) 873-2171



mcortes@nc.nrcs.usda.gov

Date: August 26, 2010

Subject: Farmland Conversion Impact Rating form NRCS-CPA-

106

To: Andy Belcher

Planner/GIS Technician

Mulkey Engineers & Consultant

Cary, NC

File Code: 310-11-11

The following information is in response to your request asking for information on farmlands for the US 17 Corridor Study, which includes Military Cutoff Road Extension in New Hanover, and the Hampstead Bypass in New Hanover and Pender Counties.

Prime farmland does not include land already in or committed to urban development or water storage. Prime Farmland "already in" urban development includes all land that has been designated for commercial or industrial use or residential use that is not intended at the same time to protect farmland in a

- 1. Zoning code or ordinance adopted by the state or local unit of government or,
- 2. A comprehensive land use plan which has expressly been either adopted or reviewed in its entirety by the unit of local government in whose jurisdiction it is operative within 10 years preceding the implementation of the project.

According to the zoning maps provided, the area in New Hanover County meets the above criteria. NRCS-PA-106 forms have been completed. The area is exempt. No need to evaluate impact on farmland.

The area in Pender County was evaluated following the same procedure. Areas that are not exempt were evaluated. NRCS has completed Parts II, IV and V as required by the Farm Land Policy Act Register.

If you have any question please feel free to call me at (919) 873-2171.

Milton Cortés

Assistant State Soil Scientist

(Rev. 1-91)

RT I (To be completed by Federal Agency) 3.		3. Date	3. Date of Land Evaluation Request 3/9/10 4. Sheet 1 of 1						
Willitary Cuton Road Extension, 0-4751			5. Federal Agency Involved State Funded 6. County and State New Hanover County, NC						
Does the corridor contain prime, unique statewide or local (If no, the FPPA does not apply - Do not complete addition)			4. Acre	s Irrigated Avera	age Farm Size				
5. Major Crop(s)	6. Farmable La	and in Govern	nment Jurisdiction	1	7. Amou	unt of Farmland A	s Defined in FPPA		
	Acres:		%		Acre	es:	%		
Name Of Land Evaluation System Used	9. Name of Lo	cal Site Asse	And the second s		10. Date	Land Evaluation	Returned by NRCS		
New Hanover						6/11/20	010		
PART III (To be completed by Federal Agency)			Alterna M1		idor For VI2	Segment			
A. Total Acres To Be Converted Directly			118.62	119					
B. Total Acres To Be Converted Indirectly, Or To Receive	Services		0		.75	 			
C. Total Acres In Corridor	COLVICCO		118.62	119	75	0.00	0.00		
PART IV (To be completed by NRCS) Land Evalua	tion Informatio	20	110.02	113	.73	0.00	0.00		
		<i>)</i> "'	63						
A. Total Acres Prime And Unique Farmland			0	THE RESERVED	2				
B. Total Acres Statewide And Local Important Farmland			0	-	2				
C. Percentage Of Farmland in County Or Local Govt. Up		The second second	0	0	2				
D. Percentage Of Farmland in Govt. Jurisdiction With Sar			0)				
PART V (To be completed by NRCS) Land Evaluation In value of Farmland to Be Serviced or Converted (Scale		person diversity with the person of the							
PART VI (To be completed by Federal Agency) Corrid	lor	Maximum							
Assessment Criteria (These criteria are explained in	7 CFK 050.5(C))	Points							
1. Area in Nonurban Use		15				ļ			
2. Perimeter in Nonurban Use		10		_					
Percent Of Corridor Being Farmed A Protection Provided By State And Level Covernment On the Protection Provided By State And Level By State And Level By State And Level By State And Level By State	nt .	20							
Protection Provided By State And Local Governme Size of Present Farm Unit Compared To Average	rit.	20 10							
		25				 			
6. Creation Of Nonfarmable Farmland		5		_		 			
7. Availability Of Farm Support Services 8. On-Farm Investments		20				+			
Seffects Of Conversion On Farm Support Services		25							
10. Compatibility With Existing Agricultural Use		10		+					
TOTAL CORRIDOR ASSESSMENT POINTS		160	0	0					
PART VII (To be completed by Federal Agency)		1100000	•	+ •	W	0	0		
Relative Value Of Farmland (From Part V)	1	100	3						
Total Corridor Assessment (From Part VI above or a loc	cal site	160	***			1			
assessment)		100	0	0		0	0		
TOTAL POINTS (Total of above 2 lines)		260	0	0		0	0		
Corridor Selected: Z. Total Acres of Fa		3. Date Of S	Selection:	4. Was	A Local S	Site Assessment l	Jsed?		
Converted by Pro	oject:								
					YES	□ NO □			
5. Reason For Selection:									
Signature of Person Completing this Part:					DAT	E			
			- 1:		190.0				
NOTE: Complete a form for each segment with	more than on	e Alternate	e Corridor			2004 W.V.B			

(Rev. 1-91)

RT I (To be completed by Federal Agency) 3. I		3. Date	3. Date of Land Evaluation Request 3/9/10 4. Sheet 5 of 5						
Name of Project Hampstead Bypass, R-3300			5. Federal Agency Involved State Funded						
2. Type of Project Bypass of Hampstead of	be of Project Bypass of Hampstead on new location 6. Cou			inty and State New Hanover County, NC					
PART II (To be completed by NRCS)			Request Received		2. Pers	on Completing Forr	" Nece Acc		
Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form			YES NO A Acres Irrigated Average Farm S						
5. Major Crop(s)			nment Jurisdiction	n	7. Amou	nt of Farmland As I	Defined in FPPA		
	Acres:		%		Acre	s:	%		
8. Name Of Land Evaluation System Used **Mew Hanover**	9. Name of Loc	cal Site Asse	ssment System		10. Date	Land Evaluation R			
PART III (To be completed by Federal Agen	cy)			tive Corr	PANEL PROPERTY OF THE PAREL PA	7			
A. Total Acres To Be Converted Directly			EH 3		0.5	R 3	U 3		
B. Total Acres To Be Converted Indirectly, Or To	Raceiva Services		261.07 0	274	.65	245.86	185.60		
C. Total Acres In Corridor	TREBUTY GUIVIOUS		261.07	274	65	245.86	185.60		
PART IV (To be completed by NRCS) Land	Evaluation Informatio	n				240.00			
A. Total Acres Prime And Unique Farmland			0	C	}	0	0		
B. Total Acres Statewide And Local Important Fa	armland		0		0	0	0		
C. Percentage Of Farmland in County Or Local		ed	0		0	0	0		
D. Percentage Of Farmland in Govt. Jurisdiction \			0		0	0	0		
PART V (To be completed by NRCS) Land Evalu									
value of Farmland to Be Serviced or Converted									
PART VI (To be completed by Federal Agency Assessment Criteria (These criteria are expla		Maximum Points							
1. Area in Nonurban Use		15	4						
2. Perimeter in Nonurban Use		10							
Percent Of Corridor Being Farmed		20							
Protection Provided By State And Local Go		20							
5. Size of Present Farm Unit Compared To Av	rerage	10							
Creation Of Nonfarmable Farmland		25							
7. Availablility Of Farm Support Services		5							
8. On-Farm Investments		20		_					
9. Effects Of Conversion On Farm Support So		25							
10. Compatibility With Existing Agricultural Us		10		-					
TOTAL CORRIDOR ASSESSMENT POINTS	5	160	0	0		0	0		
PART VII (To be completed by Federal Agend	cy)								
Relative Value Of Farmland (From Part V)		100							
Total Corridor Assessment (From Part VI above or a local site assessment)		160	0	0		0	0		
TOTAL POINTS (Total of above 2 lines)		260	0	0		0	0		
	es of Farmlands to be	3. Date Of S	Selection:	4. Was	A Local S	ite Assessment Us	ed?		
Converte	ed by Project:								
					YES	□ NO □			
5. Reason For Selection:							ø		
Signature of Person Completing this Part:		-	,		DAT	F			
orginature of Foresoft Completing tills Fart.					DAI	L			
NOTE: Complete a form for each segme	nt with more than on	e Alternat	e Corridor						
1401L. Complete a form for each segme	THE WILL HIGHE CHAILOTT	o / literilati	COMMON						

(Rev. 1-91)

PART I (To be completed by Federal Agency)		3. Date	of Land Evaluation	Request 3	/9/10	Sheet 4 of	5		
1. Name of Project Hampstead Bypass, R-3300			5. Federal Agency Involved State Funded 6. County and State Pender County, NC						
2. Type of Project Bypass of Hampstead on new lo	ocation								
PART II (To be completed by NRCS)			1. Date Request Received by NRCS 2. Person Completing Form			(State Office)			
 Does the corridor contain prime, unique statewide or local im (If no, the FPPA does not apply - Do not complete additional 	parts of this for	rm).	YES NO T 4. Acres Irrigated Average Farm			acres			
5. Major Crop(s)			nment Jurisdiction			t of Farmland As De 348 . 304			
Name Of Land Evaluation System Used	Acres: 4	127, 8	ssment System	76/.		Land Evaluation Re	% 62		
Pender		1/17	sament dystem		U. Date	6/11/20	10		
PART III (To be completed by Federal Agency)			Alternativ	ve Corrido O 2		egment	U 2		
A. Total Acres To Be Converted Directly			312.84	294.2		294.18	167.46		
B. Total Acres To Be Converted Indirectly, Or To Receive S	ervices		0	0		0	0		
C. Total Acres In Corridor			312.84	294.2	2	294.18	167.46		
PART IV (To be completed by NRCS) Land Evaluation	on Informatio	n							
A. Total Acres Prime And Unique Farmland			67.48	58.	10	58.12	49.88		
B. Total Acres Statewide And Local Important Farmland			72.36	48.		48.48	8.05		
C. Percentage Of Farmland in County Or Local Govt. Unit	To Be Convert	ed	0.0401	0.0	306	0.0306	0.0166		
D. Percentage Of Farmland in Govt. Jurisdiction With Same			61.9	76.		76.1	76.1		
PART V (To be completed by NRCS) Land Evaluation Inforvalue of Farmland to Be Serviced or Converted (Scale of			32	76		26	32		
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 C	7	Maximum Points	3				3-		
1. Area in Nonurban Use		15	7	7		٦	4		
Perimeter in Nonurban Use		10	7	8		8	3		
Percent Of Corridor Being Farmed		20	a	a		a	3		
Protection Provided By State And Local Government		20	0	0		0	0		
Size of Present Farm Unit Compared To Average		10	10	10	1700	10	10		
6. Creation Of Nonfarmable Farmland		25	25	as		25	25		
7. Availablility Of Farm Support Services		5	a	a		2	2		
8. On-Farm Investments		20	4	4		4	4		
9. Effects Of Conversion On Farm Support Services		25	25	25		25	25		
10. Compatibility With Existing Agricultural Use		10	2	L		ı	Ø		
TOTAL CORRIDOR ASSESSMENT POINTS		160	0 84	0 8	A	0 84	0 74		
PART VII (To be completed by Federal Agency)									
Relative Value Of Farmland (From Part V)		100							
Total Corridor Assessment (From Part VI above or a local site assessment)		160	0	0		0	0		
TOTAL POINTS (Total of above 2 lines)		260	0	0		0	0		
Corridor Selected: Converted by Proje	scalings in process, verscapes in process.	3. Date Of S	Selection:	4. Was A	Local Sit	e Assessment Used	l d?		
			YES NO						
5. Reason For Selection:									
						2			
Signature of Person Completing this Part:		-			DATE				
NOTE: Complete a form for each segment with n	nore than on	e Alternat	e Corridor			20.00 D.10			

United States Department of Agriculture
Natural Resources Conservation Service
4407 Bland Road, Suite 117
Raleigh, North Carolina 27609

Milton Cortés, Assistant State Soil Scientist Telephone No.: (919) 873-2171 Fax No.: (919) 873-2157 E-mail: milton.cortes@nc.usda.gov

March 25, 2014

Kat Bukowy Planner Mulkey Engineers & Consultants 6750 Tryon Road Cary, North Carolina 27518

Ms. Bukowy;

The following information is in response to your review request in the US 17 Hampstead Bypass project (TIP U-4751 and R-3300) projects.

Projects are subject to Farmland Protection Policy Act (FPPA) requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a Federal agency or with assistance from a Federal agency.

For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

Farmland means prime or unique farmlands as defined in section 1540(c)(1) of the Act or farmland that is determined by the appropriate state or unit of local government agency or agencies with concurrence of the Secretary to be farmland of statewide of local importance.

"Farmland" does not include land already in or committed to urban development or water storage. Farmland ``already in" urban development or water storage includes all such land with a density of 30 structures per 40-acre area. Farmland already in urban development also includes lands identified as ``urbanized area" (UA) on the Census Bureau Map, or as urban area mapped with a ``tint overprint" on the USGS topographical maps, or as ``urban-built-up" on the USDA Important Farmland Maps. See over for more information.

The area in question meets one or more of the above criteria for Farmland. Farmland area will be affected or converted. Enclosed is the Farmland Conversion Impact Rating form AD1006 with PARTS II, IV and V completed by NRCS. The corresponding agency will need to complete the evaluation, according to the Code of Federal Regulation 7CFR 658, Farmland Protection Policy Act.

If you have any questions, please contact me at number above.

Sincerely,

Milton Cortes

Milton Cortes Assistant State Soil Scientist



Projects and Activities Subject to FPPA

Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a Federal agency or with assistance from a Federal agency.

Assistance from a Federal agency includes:

- Acquiring or disposing of land.
- Providing financing or loans.
- Managing property.
- Providing technical assistance

Activities that may be subject to FPPA include:

- State highway construction projects, (through the Federal Highway Administration)
- Airport expansions
- Electric cooperative construction projects
- Railroad construction projects
- Telephone company construction projects
- Reservoir and hydroelectric projects
- Federal agency projects that convert farmland
- Other projects completed with Federal assistance.

Activities not subject to FPPA include:

- Federal permitting and licensing
- Projects planned and completed without the assistance of a Federal agency
- Projects on land already in urban development or used for water storage
- Construction within an existing right-of-way purchased on or before August 4, 1984
- Construction for national defense purposes
- Construction of on-farm structures needed for farm operations
- Surface mining, where restoration to agricultural use is planned
- Construction of new minor secondary structures such as a garage or storage shed.

PART I (To be completed by Federal Agency)			Date of Land Evaluation Request 4. Sheet 1 of _			of		
1. Name of Project US 17 Hampstead Bypass			5. Federal Agency Involved State Funded/USACE permitting					
2. Type of Project Corridor Project on New Location	on .	6. Cour	ity and State Nev	and State New Hanover, NC				
PART II (To be completed by NRCS)		1 Date 3/2	Request Received by	y NRCS	NRCS 2 Person Completing Form			
Does the corridor contain prime, unique statewide or local (If no, the FPPA does not apply - Do not complete addition			YES 🗸 NO 🗌		4. Acres	Irrigated Average 60	Farm Size	
5 Major Crop(s)			nment Jurisdiction	- 11 15		t of Farmland As D		
Corn	Acres: 73,	341 acre	es % 52	%		.73,341 acr		
8 Name Of Land Evaluation System Used New Hanover Co. LESA	9. Name of Local	I Site Asse	Assessment System 10. Date Land Evaluation Return 3/25/14				eturned by NRCS	
PART III (To be completed by Federal Agency)			Alternati Corridor A		dor For S dor B	egment	Corridor D	
A. Total Acres To Be Converted Directly			262.463					
B. Total Acres To Be Converted Indirectly, Or To Receive	Services		2021100					
C. Total Acres In Corridor			262.463	1				
PART IV (To be completed by NRCS) Land Evalua	tion Information			1		55.6		
			242.44					
A. Total Acres Prime And Unique Farmland			243.14					
B. Total Acres Statewide And Local Important Farmland			19.32	1-5-1				
C. Percentage Of Farmland in County Or Local Govt. Un			0.3579					
D. Percentage Of Farmland in Govt, Jurisdiction With Sam			42	- 1				
PART V (To be completed by NRCS) Land Evaluation Int value of Farmland to Be Serviced or Converted (Scale		Relative	26					
	T							
PART VI (To be completed by Federal Agency) Corrid Assessment Criteria (These criteria are explained in 7		Vlaximum Points						
Area in Nonurban Use		15	14	<u> </u>				
Perimeter in Nonurban Use		10	10					
Percent Of Corridor Being Farmed		20	8					
Protection Provided By State And Local Government	nt	20	0					
5. Size of Present Farm Unit Compared To Average		10	10					
6. Creation Of Nonfarmable Farmland		25	0					
7. Availablility Of Farm Support Services		5	5					
8. On-Farm Investments		20	4	ļ				
Effects Of Conversion On Farm Support Services		25	0				ļ	
10. Compatibility With Existing Agricultural Use		10	2			- v		
TOTAL CORRIDOR ASSESSMENT POINTS		160	53	0		0	0	
PART VII (To be completed by Federal Agency)								
Relative Value Of Farmland (From Part V)		100	26	0		0	0	
Total Corridor Assessment (From Part VI above or a loc assessment)	al site	160	53	0		0	0	
TOTAL POINTS (Total of above 2 lines)		260	79	0		0	0	
Corridor Selected: 2. Total Acres of Far	1 *	. Date Of	Selection:	4. Was	A Local Sit	te Assessment Use	ed?	
Converted by Pro	ject:							
					YES [NO		
5. Reason For Selection:								
Signature of Person Completing this Part:					DATE			
NOTE: Complete a form for each segment with	more than one	Alternat	e Corridor					

NRCS-CPA-106 (Rev. 1-91)

PART I (To be completed by Federal Agency)			3. Date of Land Evaluation Request 3/25/14 Sheet 1 of 1					
1. Name of Project US 17 Hampstead E	Вуразз	5. Fede	Federal Agency Involved State Funded/USACE permitting					
2. Type of Project Corridor Project on New Location			6. County and State Pender, NC					
			Request Received by NRCS 2 Person			rson Completing Form		
Does the corridor contain prime, unique state (If no, the FPPA does not apply - Do not corr			YES NO		4. Acres	Irrigated Average	Farm Size	
5. Major Crop(s)	6. Farmable La	ind in Gover	nment Jurisdiction			nt of Farmland As D	Defined in FPPA	
Corn	Acres: 42		% 76	6%	Acres: 348,304 % 62			
8 Name Of Land Evaluation System Used Pender Co LESA	9. Name of Loc N/A	cal Site Asse	essment System		10 Date 3/25/	Land Evaluation R 14	eturned by NRCS	
PART III (To be completed by Federal A	(gency)					Segment		
			Corridor A	Corri	idor B	Corridor C	Corridor D	
A. Total Acres To Be Converted Directly			415.931					
B. Total Acres To Be Converted Indirectly, C	or To Receive Services		445.004					
C. Total Acres In Corridor		,	415.931		N- III			
PART IV (To be completed by NRCS) L	and Evaluation Informatio	n						
A. Total Acres Prime And Unique Farmland			241.29					
B. Total Acres Statewide And Local Importa	nt Farmland		174.64					
C. Percentage Of Farmland in County Or L			0.1194	73171				
D. Percentage Of Farmland in Govt. Jurisdic	tion With Same Or Higher Rela	tive Value	62					
PART V (To be completed by NRCS) Land value of Farmland to Be Serviced or Conv			45					
PART VI (To be completed by Federal Ag Assessment Criteria (These criteria are e	ency) Corridor	Maximum Points						
1. Area in Nonurban Use	7	15	9	+				
Perimeter in Nonurban Use		10	9	+				
Percent Of Corridor Being Farmed		20	10	 		 	 	
Protection Provided By State And Local Government		20	0	 		1		
Size of Present Farm Unit Compared		10	10	 				
6. Creation Of Nonfarmable Farmland		25	10				+	
7. Availablility Of Farm Support Services		5	à					
8. On-Farm Investments		20	4					
9. Effects Of Conversion On Farm Suppo	ort Services	25	Ó					
10. Compatibility With Existing Agricultura	al Use	10	a					
TOTAL CORRIDOR ASSESSMENT PO	DINTS	160	55	0	,		0	
PART VII (To be completed by Federal A	gency)							
Relative Value Of Farmland (From Part V)		100	45	0		0	0	
Total Corridor Assessment (From Part VI above or a local site assessment)		160	55	0		0	0	
TOTAL POINTS (Total of above 2 lines)		260	100	0		0	0	
	I Acres of Farmlands to be verted by Project:	3. Date Of	Selection:	4. Was	A Local Si	te Assessment Use	ed?	
Con	verted by Project.				YES	NO 🗌		
5. Reason For Selection:	I							
Signature of Person Completing this Part:					DATE	<u> </u>		
NOTE: Complete a form for each sec	ment with more than one	Alternat	e Corridor					



DEPARTMENT OF THE ARMY WILMINGTON DISTRICT, CORPS OF ENGINEERS

P. O. BOX 1890 WILMINGTON, NORTH CAROLINA 28402-1890 December 3, 2007 RECEIVED Division of Highways

DEC 1 0 2007

Preconstruction

Project Development and Environmental Analysis Branch

Regulatory Division

SUBJECT: Action ID 2007 01386, North Carolina Department of Transportation Projects U- 4751 and R-3300, Military Cutoff Road Extension, and Hampstead Bypass

Mr. Matt Wilkerson Archeology Group Supervisor North Carolina Department of Transportation Human Environment Unit 1583 Mail Service Center Raleigh, North Carolina 27699-1583

Dear Mr. Wilkerson:

Reference is made to your letter dated November 16, 2007, in which you requested that we define the undertaking and establish the Area(s) of Potential Effects (APE) or permit area for both historic structures and archaeology for the construction of the Hampstead Bypass as well as the Military Cutoff Road extension, Wilmington, New Hanover and Pender Counties, North Carolina. These projects are currently being reviewed pursuant to the NEPA/404 Merger process and on which NCDOT and the State Historic Preservation office are participating members.

Since the project does not utilize federal funds, the Corps of Engineers will serve as the lead Federal agency with respect to compliance with Section 106 of the National Historic Preservation Act. Based on the information we have available to us at this time, a section 404 permit will be required for construction of the project as it appears that it will require the discharge of fill material into waters of the United States in any of the corridors currently under consideration. However, as this project has only progressed to Concurrence Point 2 and delineations of waters and wetlands have not been conducted on a selected alternative, we are unable to provide specific information regarding the extent of the permit area or define the undertaking pursuant to Appendix C of our regulations.

We have conducted a preliminary review of the latest published version of the National Register of Historic Places and have reviewed the information that was provided in the memo dated October 4, 2005 from Mr. Peter Sandbeck to Mr. Greg Thorpe and have no additional information to provide at this time. As this project moves through the NEPA/404 process and a preferred corridor is selected, we will be able to more accurately define the permit area(s) as requested. Of course, we also would expect that as a member of the NEPA/404 Merger Team

that yours as well as SHPO's input into the evaluation of corridors will allow NCDOT to fully consider any impacts to historic/archeological properties prior to selection of a LEDPA and by copy of this letter are requesting that SHPO provide any additional information concerning such resources they may have to your office.

If additional surveys/studies are warranted as a result of the Merger Process, it is our intention to further coordinate with your office in order to fulfill our obligations in the Section 106 process. If you have further questions, please contact me at (910) 251-4611.

Sincerely,

But That

Brad Shaver, Project Manager Wilmington Regulatory Field Office

Copy Furnished (w/out enclosure)

Renee Gledhill-Earley
Environmental Review Coordinator
Administration Branch
North Carolina Historic Preservation Office
4617 Mail Service Center
Raleigh NC 27699-4617



DEPARTMENT OF THE ARMY

WILMINGTON DISTRICT, CORPS OF ENGINEERS 69 DARLINGTON AVENUE WILMINGTON, NORTH CAROLINA 28403-1343

June 2, 2010

Regulatory Division

Action ID No. 2007 1386

Mr. Jay McInnis NCDOT, PDEA 1598 Mail Service Center Raleigh, NC 27699-1598

Dear Mr. McInnis:

Reference is made to Transportation Improvement Project U-4751 and R-3300, also referred to as the Hampstead Bypass, which originates near the current terminus of Military Cutoff Road at US Highway 17, extending to the north of Hampstead as a bypass, north and west of the of the existing Highway 17 corridor, New Hanover and Pender Counties, North Carolina.

Based on coordination within the Merger process and jurisdictional efforts to date it is clear that any proposed improvements along the study corridor will likely impact multiple stream systems, most notably Harrisons Creek, Godfrey Creek, and Island Creek, and their numerous tributaries. These resource areas provide a number of benefits to receiving water including the attenuation and de-synchronization of flood events, improvements to water quality in downstream receiving waters, and the uptake and transformation of many biologically active compounds. These areas also provide valuable wildlife habitat for a variety of birds, mammals, amphibians, and reptiles. In addition, a number of the aforementioned Creeks may provide suitable spawning and foraging habitat for threatened and endangered species. You should be aware that we consider these wetlands and tributaries to be of high quality and therefore believe that all efforts should be undertaken to avoid and minimize impacts. These efforts should include when practicable, bridging to avoid wetland, stream and/or flood plain impacts, utilizing off-site detours, employing temporary work bridges during project construction, and the removal of any approach fills not necessary for this project.

As there is no Federal Highway Administration (FHWA) funding for this project and it will require a permit from the Wilmington District, U.S. Army Corps of Engineers (Corps) under authority of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act, the Corps will be the lead federal agency for ensuring compliance with National Environmental Policy Act (NEPA). Although FHWA will not be involved, we believe that this project should continue to be carried forward through the Merger Process in accordance with the 2005 Merger

agreement. In addition, we suggest that you review Appendix B of the Corps of Engineers regulations (found at 33 C.F.R. § 325, Appendix B) regarding NEPA compliance and Section 404 of the Clean Water Act to assist in your NEPA planning efforts.

Based on our initial evaluation of the project, we believe that this project will require an Environmental Impact Statement (EIS). Although we will not require that a third party contract be executed for the preparation of this document, we want to stress that it is our intent that this document will become the Corps of Engineers' NEPA document for this project. To this end, we will need to ensure that the contractor preparing the EIS does not have any financial interest in the outcome of the NEPA or 404 permit process. I have enclosed a disclosure statement that must be signed by the lead contractor developing the document and returned to us for our files. In addition, we will need to be invited to any public scoping meetings and/or public hearings you may hold concerning this project, and may need to hold hearings or scoping meetings of our own. In accordance with the Council on Environmental Quality (CEQ) requirements, we have published a Notice of Intent (NOI) to prepare an EIS in the Federal Register and will be responsible for distribution of the draft and final EIS to EPA and the public for review and comment. Finally, it is our intention to prepare our own Record of Decision (ROD) for the project once the EIS has been finalized. As the Corps will be the lead federal agency on the project, and holds ultimate responsibility for the content of the EIS, it will be incumbent upon NCDOT to provide advance copies of the EIS to the Corps for review and approval prior to NC DOT's circulation of the document to any other agency or to the public.

Department of the Army (DA) permit authorization, pursuant to Section 404 of the Clean Water Act of 1977, as amended, will be required for the discharge of excavated or fill material in waters of the United States including streams and wetlands in conjunction with this project, including disposal of construction debris. Under our mitigation policy, impacts to wetlands should first be avoided and minimized. We will then consider compensatory mitigation for unavoidable impacts. When final plans are completed, including the extent and location of any work in wetlands, our regulatory branch would appreciate the opportunity to review these plans for project-specific determinations of DA permit requirements.

During the alternatives analysis phase, the Corps, as lead Federal agency, would recommend that all investigations for Historic Properties, Essential Fish Habitat and Threatened and Endangered species be conducted in accordance with survey level investigations as conducted now on any Federal aid project. In order to ensure that our requirements pursuant to Section 106 of the Historic Preservation Act, the Magnuson-Stevens Fishery Management and Conservation Act, and Section 7 of the Endangered Species Act are met, we must be invited to any coordination and/or consultation meetings with the State Historic Preservation Office (SHPO), National Marine Fisheries Service (NMFS), and/or the US Fish and Wildlife Service. Once the Corps effect(s) determinations have been made, we expect that NC DOT will prepare appropriate documentation (eg, Biological Assessments, Surveys for historic/archeological features, EFH documentation) and forward to the Corps for review prior to transmittal to the appropriate agency.

Environmental Justice (EJ) issues (if any) will need to be clearly identified and adequately addressed in the NEPA document. Depending on the level and severity of impacts, additional public involvement and outreach may be necessary in order to fully satisfy our requirements under the EJ Executive Order.

If you have any question as the project moves forward, please do not hesitate to contact Brad Shaver, Div 3-DOT Project Manager in the Wilmington Regulatory Field Office at 910-251-4611.

Sincerely,

Henry Wicker Scott McLendon Acting Chief, Regulatory Division

Enclosure

Copies furnished (without enclosure):

NCDOT, Division Three Attn: Mason Herndon 124 Division Drive Wilmington, NC 28401

Mr. Pete Benjamin U.S. Fish and Wildlife Service Fish and Wildlife Enhancement Post Office Box 33726 Raleigh, North Carolina 27636-3726

Mr. Chris Militscher United States Environmental Protection Agency Office of Environment Assessment 310 New Bern Avenue, Room 206 Raleigh, North Carolina 27601

Mr. Travis Wilson North Carolina Wildlife Resources Commission 1142 I-85 Service Road Creedmoor, North Carolina 27522

Mr. Steve Sollod North Carolina Division of Coastal Management 2728 Capital Blvd. Raleigh, North Carolina 27604

Mr. Ron Sechler, NOAA National Marine Fisheries Service Pivers Island Beaufort, North Carolina 28516

David Wainwright, North Carolina Division of Water Quality North Carolina Department of Environment and Natural Resources 1650 Mail Service Center Raleigh, North Carolina 27699-1650

U.S. ARMY CORPS OF ENGINEERS

WILMINGTON DISTRICT

Action Id. 2007 1386

County: New Hanover/Pender

U.S.G.S. Quad: Multiple Quads

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Applicant:

NCDOT - PDEA

Agent:

Mulkey Engineers and Consultants

Address:

attn: Amy James

attn: Mark Mickley

1598 Mail Service Center

6750 Tryon Road

Raleigh, NC 27699-1598

Cary, NC 27518

Property description:

Size (miles)

approximately 13

Nearest Town Hampstead

Nearest Waterway

Multiple tributaries

River Basin

Cape Fear

USGS HUC

03030007

Coordinates

N 34.3500 W 77.7622

Location description The projected corridor originates just north of Wilmington near Military Cutoff Road, New Hanover County and terminates just north of Hampstead adjacent to Holly Shelter game lands, Pender County.

Indicate Which of the Following Apply:

A. Preliminary Determination

Based on preliminary information, there may be wetlands on the above described property. We strongly suggest you have this property inspected to determine the extent of Department of the Army (DA) jurisdiction. To be considered final, a jurisdictional determination must be verified by the Corps. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331).

B. Approved Determination

- There are Navigable Waters of the United States within the above described property subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are wetlands on the above described property subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
 - We strongly suggest you have the wetlands on your property delineated. Due to the size of your property and/or our present workload, the Corps may not be able to accomplish this wetland delineation in a timely manner. For a more timely delineation, you may wish to obtain a consultant. To be considered final, any delineation must be verified by the Corps.
 - The wetland on your property have been delineated and the delineation has been verified by the Corps. We strongly suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.
 - The wetlands have been delineated and surveyed and are accurately depicted on the plat signed by the Corps Regulatory Official identified below on _____. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- There are no waters of the U.S., to include wetlands, present on the above described property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in Washington, NC, at (252) 946-6481 to determine their requirements.

Placement of dredged or fill material within waters of the US and/or wetlands without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). If you have any questions regarding this determination and/or the Corps regulatory program, please contact **Brad Shaver** at **910-251-4611**.

C. Basis For Determination

The subject features had both an ordinary high water mark and characteristics described in the 1987 Corps Delineation Manual.

D. Remarks

The site was reviewed with Mulkey Engineers and Consultants from April 2008 to April 2010. This preliminary determination is based on the delineation package submitted by Mulkey dated June 2010. The CD information which represents the preliminary JD is covered by Figures 3-1 through 3-23 and covers over 500 aquatic resources.

Corps Regulatory Official: _	Bred EShard	
Corps Regulatory Official: _	D-11 - 01 - 00 -	

Date 8/30/2010

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the attached customer Satisfaction Survey or visit http://www.saw.usace.army.mil/WETLANDS/index.html to complete the survey online.

Copy furnished:

NCDENR-DWQ attn: Mr. David Wainwright 1650 Mail Service Center Raleigh, NC 27699-1650

NCDENR-DWQ attn: Mason Herndon 225 Green Street, Suite 714 Fayetteville, NC 28301-5043

NC DOT Division 3 attn: Anneliese Westphal 124 Division Drive Wilmington NC 28401

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): Aug vst 30, 2010
- B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Amy E. James NCDOT Natural Environment Unit 1598 Mail Service Center Raleigh, NC 27699-1598

- C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Wilminste Field office, Harastead Bulass (4-4751), 2007 1386
- D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: (USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: NC County/parish/borough: New Hanover/Pender City: Hampstead

Center coordinates of site (lat/long in degree decimal format): Lat. 34.350017°, Long. -77.762207°, Universal Transverse Mercator:

Name of nearest waterbody: Island Creek/Godfrey Creek/Harrison Creek

Identify (estimate) amount of waters in the review area:

Non-wetland waters: (Stream) 147,172.9 linear feet: (Pond) 33.0 acres.

Cowardin Class: see waters upload table

Stream Flow:

Wetlands: 2,858 acres.

Cowardin Class: see waters upload table

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: N/A Non-Tidal: N/A

E. APPL		ED FOR	SITE EVALUATION (CHECK ALL THAT
	Office (Desk) Determ	ination.	Date:
\boxtimes	Field Determination.	Date(s):	multiple dates April 2008 through April 2010

- 1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.
- 2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply
 checked items should be included in case file and, where checked and requested, appropriately reference sources below):
Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
Data sheets prepared/submitted by or on behalf of the
applicant/consultant.
Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps:
Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas:☐ USGS NHD data.☐ USGS 8 and 12 digit HUC maps.
☑ U.S. Geological Survey map(s). Cite scale & quad name:
☐ USDA Natural Resources Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name: .
State/Local wetland inventory map(s):
FEMA/FIRM maps:
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum
of 1929)
☐ Photographs: ☐ Aerial (Name & Date):
or ☐ Other (Name & Date): .
Previous determination(s). File no. and date of response letter: .
Other information (please specify): Lide
IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.
Signature and date of Regulatory Project Manager (REQUIRED) Signature and date of person requesting preliminary JD (REQUIRED, unless obtaining the signature is impracticable)



DEPARTMENT OF THE ARMY

WILMINGTON DISTRICT, CORPS OF ENGINEERS 69 DARLINGTON AVENUE WILMINGTON, NORTH CAROLINA 28403-1343

December 21, 2012

Regulatory Division

Action ID No. SAW 2007-01386

Mr. Colin Mellor North Carolina Department of Transportation Natural Environment Section 1598 Mail Service Center Raleigh, North Carolina 27699-1598

Dear Mr. Mellor:

This letter confirms the initial field review of possible mitigation sites for the future Military Cut-off extension and Hampstead Bypass Project, TIP# R-3300, U-4751, spanning New Hanover and Pender Counties. Three properties were visited with members of the Merger Team as well as other Wilmington Corps Field Office staff on October 31, 2012. The three sites included; a partially developed tract at the corner of Gordon Road and Military Cutoff Rd., an approximate 30 acre block of undeveloped land in Greenview Ranches, and finally an over 400 acre tract of land located off Sidbury Road currently owned by Ms. Agnes Beane.

The meeting was requested by the NCDOT to explore the potential each site had as mitigation for future projects in the area. The undeveloped tract at the corner of Gordon and Military Cutoff has less potential due to drainage issues associated with downstream developments as compared to the other sites. It was agreed that Greenview Ranches and Sidbury had potential as future mitigation sites but the field visits served only as preliminary discussions not as an endorsement of these sites. If the Department decides to move forward with these sites it was discussed that initial hydrologic monitoring would be beneficial in plan development.

Please be reminded that the Corps operates under guidance in the form of the mitigation rule (CFR Title 33, Part 332) which speaks to the preferred method of compensatory mitigation. Permittee responsible mitigation is not preferred to approved mitigation banks or in lieu fee programs, therefore it would be premature to endorse mitigation contrary to the mitigation rule at this time. Again any decision regarding an approved mitigation plan would come at the time of permit processing.

If you have any questions, please do not hesitate to contact me at the Wilmington Regulatory Field Office, telephone (910) 251-4611.

Sincerely,

Brad Shaver, Project Manager Wilmington Regulatory Division

Copies Furnished:

Mr. Travis Wilson North Carolina Wildlife Resource Comm. 1718 Hwy. 56 West Creedmoor, North Carolina 27522

Mr. Gary Jordan
United States Fish and Wildlife Service
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. Mason Herndon North Carolina Division of Water Quality 225 Green Street, Suite 714 Fayetteville, North Carolina 28301-5043

Mr. Steve Sollod
Division of Coastal Management
North Carolina Department of
Environment and Natural Resources
1638 Mail Service Center
Raleigh, North Carolina 27699-1638

Mr. Jay McInnis, PE PDEA, Eastern 1548 Mail Service Center Raleigh, North Carolina 27699-1548



DEPARTMENT OF THE ARMY

WILMINGTON DISTRICT, CORPS OF ENGINEERS 69 DARLINGTON AVENUE WILMINGTON, NORTH CAROLINA 28403-1343

June 19, 2013

Regulatory Division

Action ID No. SAW-2007-1386

Mr. Jay McInnis NCDOT, PDEA 1548 Mail Service Center Raleigh, NC 27699-1548

Dear Mr. McInnis:

Please reference transportation improvement project U-4751 and R-3300, also referred to as the Hampstead Bypass, which originates near the current terminus of Military Cutoff Road into Highway 17 and will extend to the north of Hampstead as a bypass along Highway 17. This proposed project would cross County lines from New Hanover into Pender County, North Carolina.

As you are aware during your scoping process for the Draft Environmental Impact Statement (DEIS) the citizens of Hampstead had traffic concerns with the preferred alternative. In order to address their concerns, the North Carolina Department of Transportation (NCDOT) proposed to construct a second interchange designed on the northern end of the project as well as two additional lanes between the proposed interchanges. These additional changes have not been presented to the public through the National Environmental Protection Act (NEPA) scoping process and the question has been raised as to whether or not the NCDOT would need to provide a supplemental DEIS to the Corps for circulation of the aforementioned project. It is the Corps' opinion, based on Sec. 1502.9 of Council of Environmental Quality Regulations for Implementing NEPA, that changes which have occurred since release of the DEIS are substantial and need to be further described in a supplemental DEIS. This supplemental effort would then be re-circulated through the Federal Register as well as a public notice soliciting comment.

This supplemental effort should clearly describe the changes that have occurred subsequent to the release of the DEIS and provide the history and rationale for such changes. This supplemental DEIS will not serve to revisit the concurrence point determination of Least Environmentally Damaging and Practicable Alternative (LEDPA) in accordance with the Merger Process. The decision to process a supplement provides the affected public and federal and state agencies an opportunity to comment on the revised project and these comments will then be addressed in the Final Environmental Impact Statement (FEIS).

Following this correspondence the Corps will forward a Notice of Intent (NOI) to the Federal Register for publication. In order to provide an accurate NOI, please provide the Corps an idea as to when the supplemental document may be forwarded for comment. This will provide the Corps a sense of timing to place on the NOI alerting interested parties of a projected release date.

In closing, this decision was not taken lightly. However, the Corps believes this decision best follows the procedures and intent of NEPA. If you have any questions regarding this decision or desire to discuss further, please don't hesitate to call me at (910) 251-4930 or Brad Shaver at (910)251-4611.

Sincerely,

Henry Wicker

↑ Assistant Chief, Regulatory Division

Copy Furnished:

Mason Herndon
North Carolina Department of Environment
and Natural Resources
Division of Water Quality
Fayetteville Regional Office
225 Green Street, Suite 714
Fayetteville, NC 28301



DEPARTMENT OF THE ARMY

WILMINGTON DISTRICT, CORPS OF ENGINEERS 69 DARLINGTON AVENUE WILMINGTON, NORTH CAROLINA 28403-1343

January 6, 2014

Regulatory Division

Action ID No: SAW-2007-01386

John T. Eddins, Ph.D.
Advisory Council on Historic Preservation
Office of Federal Agency Programs
Federal Permitting, Licensing, and Assistance Section
1100 Pennsylvania Avenue, NW
Suite 803
Washington, D.C., 20004

Dear Dr. Eddins:

The North Carolina Department of Transportation (NCDOT) proposes to construct the SR 1409 (Military Cutoff Road) Extension and US 17 Hampstead Bypass in New Hanover and Pender Counties under State Transportation Improvement Program Project Numbers U-4751 & R-3300. For clarity, U-4751 and R-3300 are being reviewed as a single action and therefore will be referred to as the "project" in this correspondence and in the enclosed documentation. The project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and implemented by the Advisory Council on Historic Preservation's regulations for compliance codified as 36 CFR Part 800. The Federal Highway Administration is not funding this project; as such, and because implementation of this project will require authorization under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE), Wilmington District is serving as the lead Federal agency with respect to ensuring compliance with Section 106 of the NHPA.

After consultation with the North Carolina State Historic Preservation Office, it was determined that the subject project would have an adverse effect on the Mount Ararat AME Church, which is determined eligible for the National Register of Historic Places under Criterion C for architecture. Subsequently, the NCDOT prepared a notification of adverse effect as required by the Council in Part 800.6(a)(1). This documentation does not proffer a formal invitation to the Council for participation in the consultation because none of the circumstances specified in Part 800.6(1)(i)(A)-(C) exist for the project.

In accordance with 36 CFR Part 800.6(a)(1), the USACE is notifying the Council of the adverse effect finding for the subject project; supporting documentation for this finding is enclosed.

If you have any questions or need additional information, please contact Brad Shaver, Project Manager, Wilmington Regulatory Field Office, at (910) 251-4611.

Sincerely,

Scott C. McLendon

Chief, Regulatory Division

Enclosure

Copy furnished with enclosure:

North Carolina State Historic Preservation Office Attn: Ms. Renee Gledhill-Earley 4617 Mail Service Center Raleigh, NC 27699-4617

Copy furnished without enclosure:

Ms. Kate Husband, Architectural Historian Human Environment Section 1598 Mail Service Center Raleigh, NC 27699-1598

CESAW-RGL/B. Shaver

CESAW-RGL/D. Beter

CESAW-RG/H. Wicker



United States Department of the Interior

FISH AND WILDLIFE SERVICE Raleigh Field Office Post Office Box 33726 Raleigh, North Carolina 27636-3726

September 16, 2005



Gregory J. Thorpe, Ph.D. North Carolina Department of Transportation Project Development and Environmental Analysis 1548 Mail Service Center Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

This letter is in response to your request for comments from the U.S. Fish and Wildlife Service (Service) on the potential environmental effects of the proposed Military Cutoff Road extension from US 17 (Market Street) to the proposed I-140 in New Hanover County (TIP No. U-4751) and the proposed US 17 Bypass of Hampstead in New Hanover and Pender Counties (TIP No. R-3300). These comments provide scoping information in accordance with provisions of the Fish and Wildlife Coordination Act (16 U.S.C. 661-667d) and section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

A view of recent aerial photographs of the project study area reveals a significant amount of forested wildlife habitat. Much of this forested land is likely wetland. New location projects in undeveloped land can have large negative effects on fish and wildlife habitat through direct habitat loss and fragmentation of remaining habitat. The effects of forest habitat fragmentation usually extend well beyond the project footprint and can lead to local extirpation of forest interior species and wildlife species which require large home ranges or that travel extensive distances for all or part of their life history (e.g. black bear (*Ursus americanus*)). Roads often act as physical barriers to wildlife movement and/or cause significant wildlife mortality in the form of road killed animals. Forest fragmentation can lead to increased predation of some species and increased brown-headed cowbird (*Molothrus ater*) parasitism of the nests of neotropical migrant birds. Habitat fragmentation also often facilitates invasive and/or nonnative species colonization of fragmented lands.

The two proposed projects are especially problematic for federally listed endangered and threatened species. To assist you, a county-by-county list of federally protected species known to occur in North Carolina and information on their life histories and habitats can be found on our web page at http://nc-es.fws.gov/es/countyfr.html. The North Carolina Natural Heritage Program (NCNHP) database reveals several relatively recent occurrences of the federally endangered red-cockaded woodpecker (*Picoides borealis*) and rough-leaved loosestrife (*Lysimachia asperulaefolia*) within the project study area and near potential alignments for the two projects. These occurrences are clustered to the west of US 17 and north of the existing

terminus of Military Cutoff Road. There is also a large concentration of red-cockaded woodpecker clusters within the Holly Shelter Game Land. These birds are part of a designated primary core population of the Mid-Atlantic Coastal Plain Recovery Unit. The project study area needs to be thoroughly surveyed for red-cockaded woodpeckers and rough-leaved loosestrife and, if suitable habitat exists, any other species listed for New Hanover and Pender Counties. It is important to note that even if no federally protected species is directly affected by the project, the indirect effects of isolating small populations by roads may be an issue.

Section 7(a)(2) of the Endangered Species Act requires that all federal action agencies (or their designated non-federal representatives), in consultation with the Service, insure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally-listed threatened or endangered species. A biological assessment/evaluation may be prepared to fulfill the section 7(a)(2) requirement and will expedite the consultation process.

If you determine that the proposed action may affect (i.e., likely to adversely affect or not likely to adversely affect) a listed species, you should notify this office with your determination, the results of your surveys, survey methodologies, and an analysis of the effects of the action on listed species, including consideration of direct, indirect, and cumulative effects, before conducting any activities that might affect the species. If you determine that the proposed action will have no effect (i.e., no beneficial or adverse, direct or indirect effect) on listed species, then you are not required to contact our office for concurrence.

For road improvement projects such as widening, realignment, bridge replacement and culvert replacement, the Service recommends the following general conservation measures to avoid or minimize environmental impacts to fish and wildlife resources:

- 1. Wetland and forest impacts should be avoided and minimized to the maximal extent practical. Areas exhibiting high biodiversity or ecological value important to the watershed or region should be avoided. Proposed highway projects should be aligned along or adjacent to existing roadways, utility corridors or other previously disturbed areas in order to minimize habitat loss and fragmentation. Highway shoulder and median widths should be reduced through wetland areas;
- 2. Crossings of streams and associated wetland systems should use existing crossings and/or occur on a bridge structure wherever feasible. Bridges should be long enough to allow for sufficient wildlife passage along stream corridors. Where bridging is not feasible, culvert structures that maintain natural water flow and hydraulic regimes without scouring or impeding fish and wildlife passage should be employed;
- 3. Bridges and approaches should be designed to avoid any fill that will result in damming or constriction of the channel or flood plain. To the extent possible, piers and bents should be placed outside the bank-full width of the stream. If spanning the flood plain is not feasible, culverts should be installed in the flood plain portion of the approach to restore some of the hydrological functions of the flood plain and reduce high velocities of flood waters within the affected area;

- 4. Bridge designs should include provisions for roadbed and deck drainage to flow through a vegetated buffer prior to reaching the affected stream. This buffer should be large enough to alleviate any potential effects from run-off of storm water and pollutants;
- 5. Off-site detours should be used rather than construction of temporary, on-site bridges. For projects requiring an on-site detour in wetlands or open water, such detours should be aligned along the side of the existing structure which has the least and/or least quality of fish and wildlife habitat. At the completion of construction, the detour area should be entirely removed and the impacted areas be planted with appropriate vegetation, including trees if necessary;
- 6. If unavoidable wetland or stream impacts are proposed, a plan for compensatory mitigation to offset unavoidable impacts should be provided early in the planning process. Opportunities to protect mitigation areas in perpetuity via conservation easements, land trusts or by other means should be explored at the outset;
- 7. Wherever appropriate, construction in sensitive areas should occur outside fish spawning and migratory bird nesting seasons. In waterways that may serve as travel corridors for fish, in-water work should be avoided during moratorium periods associated with migration, spawning and sensitive pre-adult life stages. The general moratorium period for anadromous fish is February 15 June 30;
- 8. Best Management Practices (BMP) for Protection of Surface Waters should be implemented; and
- 9. Activities within designated riparian buffers should be avoided or minimized.

We reserve the right to review any federal permits that may be required for this project, at the public notice stage. Therefore, it is important that resource agency coordination occur early in the planning process in order to resolve any conflicts that may arise and minimize delays in project implementation. In addition to the above guidance, we recommend that the environmental documentation for this project include the following in sufficient detail to facilitate a thorough review of the action:

- 1. A clearly defined and detailed purpose and need for the proposed project, supported by tabular data, if available, and including a discussion of the project's independent utility;
- 2. A description of the proposed action with an analysis of all alternatives being considered, including the upgrading of existing roads and a "no action" alternative;
- 3. A description of the fish and wildlife resources, and their habitats, within the project impact area that may be directly or indirectly affected;
- 4. The extent and acreage of waters of the U.S., including wetlands, that are to be impacted by filling, dredging, clearing, ditching, or draining. Acres of wetland impact should be

differentiated by habitat type based on the wetland classification scheme of the National Wetlands Inventory (NWI). Wetland boundaries should be determined by using the 1987 Corps of Engineers Wetlands Delineation Manual and verified by the U.S. Army Corps of Engineers;

- 5. The anticipated environmental impacts, both temporary and permanent, that would be likely to occur as a direct result of the proposed project. The assessment should also include the extent to which the proposed project would result in secondary impacts to natural resources, and how this and similar projects contribute to cumulative adverse effects;
- 6. Design features and construction techniques which would be employed to avoid or minimize impacts to fish and wildlife resources, both direct and indirect, and including fragmentation and direct loss of habitat;
- 7. Design features, construction techniques, or any other mitigation measures which would be employed at wetland crossings and stream channel relocations to avoid or minimize impacts to waters of the US; and,
- 8. If unavoidable wetland or stream impacts are proposed, project planning should include a compensatory mitigation plan for offsetting the unavoidable impacts.

The Service appreciates the opportunity to comment on this project. It is understood that a scoping meeting will be held for this project. The Service would like to attend this scoping meeting. Please inform Mr. Gary Jordan of the meeting location and date by phone at (919) 856-4520, ext. 32 or by email at gary_jordan@fws.gov. Also, if you have any questions regarding our response, please contact Mr. Jordan.

Sincerel

Pete Benjamin

Ecological Services Supervisor

cc: Dave Timpy, USACE, Wilmington, NC Brian Wrenn, NCDWQ, Raleigh, NC Travis Wilson, NCWRC, Creedmoor, NC Chris Militscher, USEPA, Raleigh, NC





North Carolina Department of Cultural Resources

State Historic Preservation Office
Peter B. Sandbeck, Administrator

Michael F. Easley, Governor Lisbeth C. Evans, Secretary Jeffrey J. Crow, Deputy Secretary

Office of Archives and History Division of Historical Resources David Brook, Director

October 4, 2005

MEMORANDUM

TO:

Greg Thorpe, Ph.D., Director

Project Development and Environmental Analysis Branch

NCDOT Division of Highways

FROM:

Peter Sandbeck Jul Smiller

SUBJECT:

Military Cutoff Road Extension in New Hanover County and Hampstead Bypass in

Pender County, u-4751 and R-3300, New Hanover and Pender Counties, ER 05-2123

Thank you for your letter of September 8, 2005, concerning the above project.

We have conducted a search of our maps and files and located the following structure of historical or architectural importance within the general area of this project:

- (NH 558) St. Stanislaus Catholic Church, SW corner of NC 133 and SR 1377.
- (NH 562) (Former) Ft. Fisher Barracks, NW corner of SR 1002 and Orange St.
- (PD 3) Poplar Grove, SE side US 17, S of jct. with SR 1572.
- (PD 255) Lillington Cemetery, N of NC 210, on Study List.
- (PD 254) Governor Samuel Ashe Grave, S side of SR 1411, (Old River Rd.)
- (PD 224) Jesse Batson House, E side SR 1411, 1.7 miles NE of jct. with US 117.
- (PD 206) Houses, SR 1418 W of US 117 both sides, on Study List.
- (PD 36) Sidbury House, E side US 117, 0.3 miles S of jct. with SR 1411, Locally Designated.
- (PD 223) Roland Batson House, E side US 117.

We recommend that a Department of Transportation architectural historian identify and evaluate any structures over fifty years of age within the project area, and report the findings to us.

We have reviewed the scoping information sheets for the Military Cutoff Road Extension and the Hampstead Bypass and would like to comment.

Concerning the Military Cutoff Road Extension to the Wilmington Bypass, only the area in the immediate vicinity of the Military Cutoff Road and US 17 intersection has been previously surveyed for the presence of archaeological resources.

Concerning the US 17 Hampstead Bypass, none of the area indicated on page 3, "Construct Bypass of US17 around Hampstead on new location", has been surveyed for the presence of archaeological resources.

Please be aware that both projects may require archaeological surveys to be performed within the project corridors when they are selected. We would be pleased to assist you in the development and review of any scopes of work, proposals, or other documents relating to this matter. If significant archaeological sites are identified, appropriate measures should be taken to minimize adverse impacts.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment please contact Renee Gledhill-Earley, environmental review coordinator, at 919 733 4763. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NCDOT Matt Wilkerson, NCDOT



North Carolina Department of Cultural Resources

State Historic Preservation Office

Peter B. Sandbeck, Administrator

Beverly Eaves Perdue, Governor Linda A. Carlisle, Secretary Jeffrey J. Crow, Deputy Secretary Office of Archives and History Division of Historical Resources David Brook, Director

January 21, 2011

MEMORANDUM

TO: Mary Pope Furr

Office of Human Environment NCDOT Division of Highways

FROM: Claudia Brown Policy Claudia Brown

SUBJECT: Historic Architectural Resources Survey Report Addendum, Military Cutoff Road and

Hampstead Bypass, U-4751 and R-3300, New Hanover and Pender Counties, ER 05-2123

We are in receipt of Kate Husband's letter of November 22, 2010, which transmits the addendum to the survey report for the above project and addresses questions that we raised about three sites: Poplar Grove Plantation, Mount Ararat AME Church, and the Wesleyan Chapel United Methodist Church.

Poplar Grove Plantation

Thank you for the additional information regarding the one-story frame structure located along the southwest boundary of the property, southeast of the Mako's Raw Bar and Grill. We concur with your original finding (in the survey report dated August 25, 2010, by Mattson, Alexander and Associates, Inc.) that the Poplar Grove Plantation remains eligible for listing in the National Register of Historic Places, and your revised finding that the current National Register boundary appears appropriate.

Mount Ararat AME Church

Upon review of the additional information regarding the interior condition of the church and interior photograph, we concur with your original finding that the property is eligible for listing in the National Register under Criterion C for Design/Construction with Criteria Consideration A for Religious Properties.

Wesleyan Chapel United Methodist Church

Upon review of the additional information regarding the interior condition of the church and interior photographs, we concur with your original finding that the property is eligible for listing in the National Register under Criterion C for Design/Construction with Criteria Consideration A for Religious Properties.

We thank you for addressing these issues. We will add the addendum to our survey files.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, Environmental Review Coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Kate Husband, PDEA/OHE

CONCURRENCE FORM FOR ASSESSMENT OF EFFECTS

Project Description: Military Cutoff Road Extension and Hampstead Bypass	
On March 8, 2011, representatives of the	
North Carolina Department of Transportation (NCDOT) Federal Highway Administration (FHWA) North Carolina State Historic Preservation Office (HPO) Other USACE (Phone)	
Reviewed the subject project and agreed on the effects findings listed within reverse of this signature page.	the table on the
Signed:	
Manylogehun	3/8/2011
Representative, NCDOT	Date
Brod EShare	3/9/11
Representative, USACE	Date
Representative, HPO	Date
Rener Gledhill-Earley	3-8-11
State Historic Preservation Officer	Date

TIP#: U-4751/R-3300 Federal Aid #: NA

County: New Hanover & Pender

Property and Status	Effect Finding	Alternative	Reasons	
Poplar Grove (NR, Criteria B &	Adverse Eff.	Current Des Avoidance Des	Poplar Grove (NR, Criteria B & Adverse Eff. Current Des - taking property 3 bisecting pancel Adverse Eff Avoidant Des - impacts to property w/ fill slope for bridge-3 fronta	orta orta
Albroakis	Aure not	Ly oresenta	impacts to troytage wil Hlane Freeway	٠
Scott's Hill Rosenwald School	Adverse EFF	Current Des	Advuse Eff Current Des - somice road thru structure	
(DE, Criteria A & C)	Adverse EFF. Avoidance	Proidance	- ROW Thru shuchure 3 access 1330cs	
Alternative U			A	
Topsail Consolidated School (DE, Criteria A & C)	No Effect		-no construction - autorative ruo pren diopper	
Alternative has been dropped	dropped			
Mount Ararat AME Church	Adverse EFF.		-taking property & control of access & taking	
(Hr. cincinal c)				
Wesleyan Chapel United	Adverse EFF.	Current Desk	- taking structure & cemetery	
Methodist Church (DE, Criterion C)	Awerse Eff.	Expression	Adverse Eff. Expression - taking structure	
HITETRADIVE				
Initialed: NCDO	NCDOT MP US	USACE HU	HPO BYS	



North Carolina Department of Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Pat McCrory Secretary Susan Kluttz Office of Archives and History Deputy Secretary Kevin Cherry

September 3, 2013

MEMORANDUM

TO: Matt Wilkerson

Office of Human Environment NCDOT Division of Highways

FROM: Ramona M. Bartos

SUBJECT: Management Summary: Archaeological Survey and Evaluation of the Proposed Military Cutoff Road

Killefor Ramona M. Boutos

Extension and US 17 Hampstead Bypass in New Hanover and Pender Counties, ER 05-2123

We have reviewed the archaeological management summary produced by Coastal Carolina Research, Inc. (CCR) for the Military Cutoff Road Extension and the Hampstead Bypass.

The area of potential effect (APE) was defined as a 33.5 mile corridor running roughly parallel to US 17 between Ogden (New Hanover County) and Hampstead (Pender County). The archaeological survey consisted of 133 acres intensively surveyed and 158 acres visually surveyed that focused on areas where local topography and hydrology suggested a medium to high probability for encountering significant archaeological resources. As a result nine archaeological sites were identified, one of which (31PD344**) was recommended eligible for inclusion on the National Register of Historic Places.

We look forward to reviewing the technical report detailing CCR's survey findings this fall.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment please contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above referenced tracking number.



North Carolina Department of Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Pat McCrory Secretary Susan Kluttz Office of Archives and History Deputy Secretary Kevin Cherry

October 15, 2013

MEMORANDUM

TO: Matt Wilkerson

Office of Human Environment NCDOT Division of Highways

FROM: Ramona M. Bartos

SUBJECT: Archaeological Report: Archaeological Survey and Evaluation of the Proposed Military Cutoff Road

KSR for Ramona M. Boutos

Extension and US 17 Hampstead Bypass in New Hanover and Pender Counties, U-4751 and R-3300,

ER 05-2123

We have reviewed the archaeological report produced by Coastal Carolina Research, Inc. (CCR) for the Military Cutoff Road Extension and the Hampstead Bypass.

The area of potential effect (APE) was defined as a 33.5 mile corridor running roughly parallel to US 17 between Ogden (New Hanover County) and Hampstead (Pender County). The archaeological survey consisted of 133 acres intensively surveyed and 158 acres visually surveyed that focused on areas where local topography and hydrology suggested a medium to high probability for encountering significant archaeological resources.

As a result of this survey nine archaeological sites were identified. Eight of these sites were recommended ineligible for listing on National Register of Historic Places (NRHP). Seven of these sites were historic in nature and included three cemeteries and four probable historic occupation sites. Only one of the ineligible sites contained prehistoric artifacts. We concur with the recommendations that these sites are not eligible for listing on the NRHP and that no further archaeological work is necessary with the exception of any affected cemeteries that may require treatment under the provisions of N.C.G.S 65-13.

One historic period site, 31PD344**, was recommended by CCR as eligible for inclusion on the NRHP. This site is a short-term mid to late18th century domestic site characterized by on-site commercial extraction of local forest products. Because this site is relatively intact and represents a discreet occupation it has the potential to yield information on the lifeways of 18th century lower socio-economic people not directly associated with the domestic core of the plantation. We concur with the recommendation for NRHP eligibility and look forward to reviewing plans for mitigation through additional data recovery or avoidance.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment please contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above referenced tracking number.

CONCURRENCE FORM FOR PROPERTIES NOT ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC PLACES

Project	Description:	
On Octo	ober 29, 2013, representatives of the	
	North Carolina Department of Transportation (NCDOT) Federal Highway Administration (FHWA) North Carolina State Historic Preservation Office (HPO) Other	
Review	ed the subject project at historic architectural resources photograph review session/cons	ultation and
All part	ies present agreed	
	There are no properties over fifty years old within the project's Area of Potential Effect	ets (APE).
Ø	There are no properties less than fifty years old which are considered to meet Criteria project's APE.	Consideration G within the
	There are properties over fifty years old within the project's APE, but based on the his and the photographs of each property, the properties identified as $\frac{79-90}{}$ are the National Register and no further evaluation of them is necessary. Photographs of the	e considered not eligible for
凶	There are no National Register-listed or Study Listed properties within the project's A	PE.
凶	All properties greater than 50 years of age located in the APE have been considered a upon the above concurrence, all compliance for historic architecture with Section 106 Preservation Act and GS 121-12(a) has been completed for this project.	t this consultation, and based of the National Historic
	More information is requested on properties	¥
Signed:	alhern Huffred	16/29/2013
Represe	entative, NCDOT	Date
FHWA,	for the Division Administrator, or other Federal Agency	Date
Represe	ntative, HPO	Date
les	ree Gledill-Early	10-29-13
State Hi	storic Preservation Officer	Date

If a survey report is prepared, a final copy of this form and the attached list will be included.

Federal Aid #: NA

TIP#: U-4751/R-3300

County: New Hanover & Pender

CONCURRENCE FORM FOR ASSESSMENT OF EFFECTS

Project Description: Military Cutoff Road Extension and Hampstead Bypass	
On March 8, 2011, representatives of the	
North Carolina Department of Transportation (NCDOT) Federal Highway Administration (FHWA) North Carolina State Historic Preservation Office (HPO) Other USACE (Phone)	
Reviewed the subject project and agreed on the effects findings listed within t reverse of this signature page.	he table on the
Signed:	
Many Pope hum	3/8/2011
Representative, NCDOT	Date
Representative, USACE	Date
Representative, HPO	Date
Renee Gledbill-Earley	3-8-11
State Historic Preservation Officer	Date

TIP#: U-4751/R-3300 Federal Aid #: NA

County: New Hanover & Pender

Property and Status	Effect Finding	Alternative	Reasons
Poplar Grove (NR, Criteria B & C)	Adverse Eff.	Current Des Avoidante Des	Poplar Grove (NR, Criteria B & Adverse Eff. Current Des - taking property 3 bisecting pance) C)
Alternative U	Adverse Eff Expressway -	Expressular	impacts to Frontage w/ Hane freeway
Scott's Hill Rosenwald School	Advurse EFF Current Des	Current Des	- service road thru structure
$(DE, CHI \in A \otimes C)$	Adverse EFF. Avoidance		-ROW thro shucture 3 access issues
Alternative U			5/13/2014, Review Revised Design, No Adverse FRECT. Plans Attached, N.H 5-18-14
Topsail Consolidated School (DE, Criteria A & C)	No Effect		-no construction - alterative has been drapped
Alternative has been dropped	dropped		
Mount Ararat AME Church	Advase EFF.		-taking property = control of access = taking
(DE, Chienon C)			cemetery markers.
M2			
Wesleyan Chapel United Methodist Church (DE,	Adverse Off.	Current Desp	- taking structure is cemetery
Criterion C) Alternative U	Adverse Eff.	Expressman	Adverse Eff. Expressional - taking structure
	10.		

Initialed:

NCDOT MP4 USACE_ |KLH 5:13/2014

HPO 629 75-14



North Carolina Department of Environment and Natural Resources **Division of Coastal Management** Charles S. Jones, Director

Michael F. Easley, Governor

William G. Ross Jr., Secretary

MEMORANDUM

TO:

Melba McGee, NCDENR

FROM:

Steve Sollod, DCM

DATE:

October 18, 2005

SUBJECT:

Military Cutoff Road Extension from US 17 (Market Street) to the Proposed I-140 in New Hanover County and the US 17 Bypass of Hampstead in New Hanover and Pender Counties, WBS Element 40191.1.1 and 40237, TIP Projects U-4751

and R-3300, Project Review No. 06-0107

The North Carolina Division of Coastal Management (DCM) has reviewed the scoping letter of the above referenced project, which was submitted to the NC State Clearinghouse for intergovernmental review. We offer the following comments, which should be considered in preparation of an environmental document.

1. A determination of consistency with the North Carolina Coastal Management Program may be required for this project. Because North Carolina's Coastal Management Program is Federally approved, a number of activities are required to comply with the program's enforceable policies even if those activities do not require Coastal Area Management Act (CAMA) permits under State law. This "Federal Consistency" authority exists under the federal Coastal Zone Management Act. It applies to any activity that is in the coastal zone, or affects any land use, water use or any natural resource within the coastal zone (even if the activity occurs outside of the coastal zone), if the activity: is a Federal activity; requires a Federal license or permit; receives Federal money; or is a plan for exploration, development or production from any area leased under the Outer Continental Shelf Lands Act. Such projects must comply with the key elements of North Carolina's Coastal Management Program. Federal Consistency requires that the applicant certify to the federal agency and DCM that the proposed activity will be conducted in a manner that is consistent with the State's coastal management program. This consistency certification includes a review of the State's coastal program and contains an analysis describing how the proposed project would be consistent, to the maximum extent feasible, with the State's enforceable coastal policies as mandated by the requirements of Federal Consistency (15 CFR 930) and North Carolina Executive Order #15. Information pertaining to the consistency determination should be included in the environmental document.

- All applicable CAMA Land Use Plans should be reviewed and the project evaluated against
 the enforceable policies of these plans. This evaluation is a part of the Federal Consistency
 requirements and this information should be included in the environmental document.
- 3. The proposed project may impact CAMA Areas of Environmental Concern (AECs) in the project study area. In this case, a CAMA Major Development and/or Dredge & Fill Permit may be required for the project. A formal DCM review of the project to determine consistency with the State's Coastal Management Program will not occur until a CAMA Major Development Permit application is received. At that time, the CAMA Major Development Permit application will be circulated to the State agencies with an interest in the proposed project for review and comment. The consideration and incorporation by NCDOT of the comments received during the NEPA/404 Merger Process into the final project design should help to expedite the CAMA Major Development Permit application review process.
- 4. DCM's GIS-based wetland inventory and mapping program provides wetland data that can be used to improve wetland avoidance, minimization, alternatives analysis, impact assessment, and mitigation site searches. DCM's GIS-based wetland maps and data may be included by DOT within the environmental document for this project. The GIS-based wetland maps and data are available through DOT's Geographic Information Systems Unit located at the Century Center on Birch Ridge Road in Raleigh. DCM's GIS-based wetland inventory and mapping program includes three wetland inventory and assessment tools available for the coastal area:
 - a. Wetland type data. This data can be used early in the planning process to avoid and minimize impacts to wetlands and specific wetland types, to estimate project impacts, and to estimate mitigation needs.
 - b. Wetland Functional Significance data (NC-CREWS). This data can be used to refine the road alignment to avoid the most ecologically significant wetlands that contribute most to their watershed's health.
 - c. <u>Potential wetland restoration and enhancement site data</u>. This data can be used to locate mitigation sites.

We hope that you find these comments helpful and that they will be addressed during planning and preparation of the environmental document for this project. During future interagency project coordination and review, DCM may have additional comments on the project, and may place conditions on the consistency determination or CAMA permit to minimize any impacts to coastal resources. The information provided in this letter shall not preclude DCM from requesting additional information throughout the interagency project coordination and review process, and following normal consistency review procedures.

If you have any questions or concerns, please contact me at (919) 733-2293 x 230, or via e-mail at steve.sollod@ncmail.net. Thank you for your consideration of the North Carolina Coastal Management Program.

MON 0 8 SOME

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF ENVIRONMENTAL HEALTH

Inter-Agency Project Review Response

 0 7 2000
Project Number
06-0107
County
New Hanover

Project Name NC DOT	Type of Project_	Military Cutoff Road Extension
Comments provided by:		from US 17 (Market Street) to the proposed I-140 in New Hanover
Regional Program Person		County & US 17 Bypass.
X Regional Supervisor for Public Water Supply S	Section	
☐ Central Office program person		
Name: Debra Benoy-Wilmington RO	Date:	11-02-05
Telephone number:	***************************************	
Program within Division of Environmental Health:		
☐ Public Water Supply		
Other, Name of Program:		13 14 15 76
Response (check all applicable):		No.
No objection to project as proposed	6 sage	2005 S
☐ No comment		
Insufficient information to complete review	Elico	0000170
Comments attached		3 OC BC SCAPE
See comments below		
An Authorization to	Constru	ct
T TOOK		
Prior to relocation	- water	lène.
	<u> </u>	

Return to:

Public Water Supply Section Environmental Review Coordinator for the Division of Environmental Health

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF ENVIRONMENTAL HEALTH

Project Number 06-0107	
County New Hanover	

Inter-Agency Project Review Response

Project	Name	SAME AS ON THE	FRONT	Type of Project	
	improvement award of a	ant should be advis nts must be approve contract or the init q.). For information, o	ed by the Divisi iation of constr	on of Environmental uction (as required	Health prior to the by 15A NCAC 18C
	with state a	t will be classified as and federal drinking w arould contact the Pub	ater monitoring	requirements. For r	nore information the
	adjacent wa	ect is constructed as aters to the harvest program, the applican	t of shellfish.	For information reg	arding the shellfish
	problem.	sposal area(s) propo For information cor nould contact the Pub	ncerning approp	oriate mosquito con	trol measures, the
	structures, a migration of	ant should be advise a extensive rodent co f the rodents to adja local health departn 407.	ontrol program n cent areas. Fo	nay be necessary in our information concer	order to prevent the ning rodent control,
	requirement sep.). For	ant should be advise nts for septic tank in information concerni On-Site Wastewater	stallations (as r ng septic tank a	equired under 15A N nd other on-site wast	ICAC 18A. 1900 et.
	The applic sanitary fac	ant should be advise cilities required for thi	ed to contact th s project.	e local health depart	ment regarding the
X(relocation Supply Sec	water lines will be re must be submitted ction, Technical Serv 7699-1634, (919) 73:	to the Division vices Branch, 16	of Environmental H	ealth, Public Water
$\overline{\mathbf{X}}$	For Region	nal and Central Office	comments, see	the reverse side of the	nis form.
J	im McRigl	ht	PWS		11-02-05
	Revie	wer	Section/Bra	anch	Date



North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue Governor Division of Water Quality Coleen H. Sullins Director

Dee Freeman Secretary

August 16, 2010

Mark Mickley Environmental Scientist Mulkey Engineers and Consultants 6750 Tryon Road Cary, NC 27518

Subject: NCDOT TIP # U-4751 and R-3300, New Hanover and Pender Counties

Cape Fear River Basin

On-Site Determination for Applicability to the Mitigation Rules (15A NCAC 2H .0506(h)

Dear Mr. Mickley:

Between January 4, 2009 and April 16, 2010, at your request and in your attendance, David Wainwright, NC Division of Water Quality (NCDWQ) staff, conducted numerous on-site determinations to review drainage and isolated wetland features associated with the proposed Hampstead Bypass (US 17 to north of US 17) and SR 1409 (Military Cutoff Road) to US 17 for applicability to mitigation rules (15A NCAC 2H .0506[h]). The drainage and wetland features are approximated on the attached maps initialed and dated August 16, 2010. Please note that only the portion of the feature located within the study area (see attached maps) where evaluated. Drainage features are summarized in the following table:

			INAGE FE	ATURES TABLE		
NUMBER	ATTACHED FEATURE MAP PAGE	JD PACKET FIGURE	FEATURE ID	JURISDICTIONAL STATUS *	MITIGATION REQUIRED	LOCATED ON USGS MAP
1	1	3-1	ASA	Perennial	Yes	Yes
2	2	3-11	BSA	Perennial	Yes	No
3	2	3-2, 3-11	BSJ	Perennial	Yes	No
4	2	3-2, 3-12	BSK	Perennial	Yes	No
5	2	3-11	BSL	Perennial	Yes	No
6	2	3-12	BSM	Perennial	Yes	No
7	2	3-13	BSN	Perennial	Yes	No
8	2	3-14	BSO	Perennial	Yes	No
9	2	3-15	BSP	Perennial	Yes	No
10	2	3-16	BSQ	Perennial	Yes	No
11	1	3-2	BDITCH1	Tributary	No	No
12	2, 3	3-15	CSA	Perennial	Yes	No
13	2, 3	3-15	CSB	Perennial	Yes	No
14	2, 3	3-15	CSC	Tributary	No	No
15	2, 3	3-11, 3-15	CCD	Intermittent	Yes	No
16	2 -	3-11	CSD	Perennial	Yes	No
17	2, 3	3-11	CSE	Tributary	No	No
18	2, 3	3-11	CSF	Tributary	No	No

Transportation Permitting Unit 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Location: 2321 Crabtree Blvd., Suite 250, Raleigh, North Carolina 27604 Phone: 919-733-1786 \ FAX: 919-733-6893 Internet: http://h2o.enr.state.nc.us/ncwetlands/



DRAINAGE FEATURES TABLE (continued)						
NUMBER	ATTACHED FEATURE MAP PAGE	JD PACKET FIGURE	FEATURE ID	JURISDICTIONAL STATUS *	MITIGATION REQUIRED	LOCATED ON USGS MAP
19	2	3-11	CSG	Intermittent	No	No
20	2	3-11	CSH	Intermittent	No	No
21	2	3-11	CSI	Perennial	Yes	No
22	3	3-15	CSJ	Perennial	Yes	No
23	3	3-15	CSK	Perennial	Yes	No
24	2, 3, 10	3-12	DSA	Perennial	Yes	No
25	9	3-6	ESA	Perennial	Yes	Yes
26	9	3-6	ESB	Perennial	Yes	No
27	3	3-15	FSA	Perennial	Yes	No
28	3	3-15	FSB	Intermittent	Yes	Yes (partially)
29	3	3-15	FSC	Intermittent	Yes	No
30	3	3-15	FSD	Intermittent	Yes	No
31	3	3-16	FSE	Perennial	Yes	No
32	3, 4	3-16	FSF	Tributary	Yes	No
33	3	3-16		Tributary	No	No
34	3, 10	3-16	FSH	Intermittent	Yes	No
35	3, 10	3-16		Perennial	Yes	No
36	3, 10	3-16	FSI	Perennial	Yes	No
37	3	3-15	FSJ	Intermittent	Yes	No
38	4	3-16	FSK	Intermittent	Yes	No
39	4	3-17	GSA	Perennial	Yes	No
40	3, 10	3-16	GSB	Intermittent	Yes	No
41	3, 10	3-16	GSG	Intermittent	Yes	No
42	10	3-16	GSX	Perennial	Yes	No
43	3, 10	3-12	GFSE	Perennial	Yes	No
44	4, 5	3-22	HBSA	Perennial	Yes	No
45	4	3-22, 3-23	TYPGAA	Intermittent	Yes	No
46	4	3-22, 3-24	HBSAA	Perennial	Yes	No
47	4, 5	3-23	HBSB	Intermittent	Yes	No
48	4, 5	3-23	HBSC	Perennial	Yes	No
49	4, 5	3-23	LIDCD(1)	Intermittent	Yes	No
50	4, 5	3-23	HBSD(1)	Perennial	Yes	No
51	4, 5	3-23	HBSD(2)	Perennial	Yes	Yes
52	4, 5	3-23	HBSE	Perennial	Yes	No
53	4	3-22	HBSF	Perennial	Yes	Yes
54	4	3-22	HBSG	Perennial	Yes	Yes
55	4	3-22	HBSH	Intermittent	Yes	No
56	5	3-28	HSA	Intermittent	Yes	No
57	5	3-18	HSB	Intermittent	Yes	No
58	5	3-23	HSC	Perennial	Yes	No
59	5	3-23	HSCA	Intermittent	Yes	No
60	5	3-23	HSD	Intermittent	Yes	No
61	4, 5	3-23	HSE	Intermittent	Yes	No
62	5	3-18	HSX	Perennial	Yes	No
63	5	3-23	HSZ	Perennial	Yes	No
64	5	3-23	HDITCH1	Tributary	No	No
65	5	3-23	HDITCH2	Tributary	No	No
66	4	3-17	ISA	Intermittent	Yes	No
67	4	3-17		Perennial	Yes	No
68	4	3-17	ISB	Perennial	Yes	Yes
69	4, 5	3-18	ISC	Intermittent	Yes	No
70	5	3-18	90,000,000	Perennial	Yes	No
71	5	3-18	ISD	Perennial	Yes	No
72	4, 5	3-17	IDITCH1	Tributary	No	No

	1 mm 1 CVV TD		GE FEATUR	ES TABLE (continu	ied)	
MUMBER	ATTACHED	JD	FEATURE	JURISDICTIONAL	MITIGATION	LOCATED
NUMBER	FEATURE	PACKET	ID	STATUS *	REQUIRED	ON USGS
73	MAP PAGE	FIGURE				MAP
74	6, 7, 8	3-8	JSA	Tributary	No	No
75	6, 7, 8	3-8		Intermittent	Yes	No
76	6, 8	3-8	JSB	Intermittent	Yes	No
	7, 8	3-8	JSC	Intermittent	Yes	No
77	7	3-9	JSD	Intermittent	Yes	No
78 79	7, 8	3-9		Perennial	Yes	No
80	5	3-18	LSA	Perennial	Yes	No
80	5 5	3-19	LSAA	Perennial	Yes	No
82		3-18	LSAB	Tributary	No	No
83	5, 6	3-18	LSB	Perennial	Yes	No
84	6, 8	3-14, 3-19	LSC	Perennial	Yes	Yes
85	6, 8	3-19	LSCA	Intermittent	Yes	No
86	6, 8	3-19		Perennial	Yes	No
86	6, 8	3-19	LSCAA	Perennial	Yes	No
88	6, 8	3-19	LSCB	Perennial	Yes	No
88	6, 8	3-19	LSCBA	Tributary	No	No
90	6, 8	3-14	LSCC	Perennial	Yes	No
90	6, 8	3-19	LSCD	Intermittent	Yes	No
91	6, 8	3-19	LSCE	Intermittent	Yes	No
93	6, 8	3-14	LSCF	Intermittent	Yes	No
	6, 8	3-8, 3-14	LSD	Perennial	Yes	No
94	6, 8	3-14	LSDA	Intermittent	Yes	No
95	6	3-14	LSE	Perennial	Yes	No
96	6, 8	3-8	LTRIB1	Tributary	No	No
97	7	3-20	MSA	Intermittent	Yes	No
98	7	3-20	MSAA	Tributary	No	No
99	7	3-20	MSB	Perennial	Yes	No
100	6	3-19	MSC	Perennial	Yes	Yes
101	6	3-19	MSCA	Perennial	Yes	Yes
102	6	3-19	MSD	Perennial	Yes	Yes
103	6	3-19	National State of the State of	Tributary	Yes	No
104	6	3-19	MSDA	Intermittent	Yes	No
105	6	3-19		Perennial	Yes	No
106	6	3-19	MSE	Perennial	Yes	No
107	5, 6	3-19	MSF	Perennial	Yes	Yes
108	6	3-19	MSFA	Perennial	Yes	No
109	6	3-19	MSFB	Intermittent	Yes	No
110	6	3-19, 3-20	MSI	Tributary	No	No
111	6	3-19, 3-20		Intermittent	Yes	No
112	6	3-19	MDITCH1	Tributary	No	No
113	6	3-19	MDITCH2	Tributary	No	No
114	6	3-19	MDITCH3	Tributary	No	No
115	6	3-19	MDITCH4	Tributary	No	No
116	6	3-19	MDITCH5	Tributary	No	No
117	6	3-19	MDITCH6	Tributary	No	No
118	6	3-19	MDITCH7	Tributary	No	No
119	6	3-19	MDITCH8	Tributary	No	No
120	6	3-19	MDITCH9	Tributary	No	No
121	6	3-19	MDITCH10	Tributary	No	No
122	6	3-19	MDITCH11	Tributary	No	No
123	6	3-19	MDITCH12	Tributary	No	No
124	7	3-10	NSA	Intermittent	Yes	No
125	7	3-10		Perennial	Yes	No
126	7	3-9	NSB	Tributary	No	No

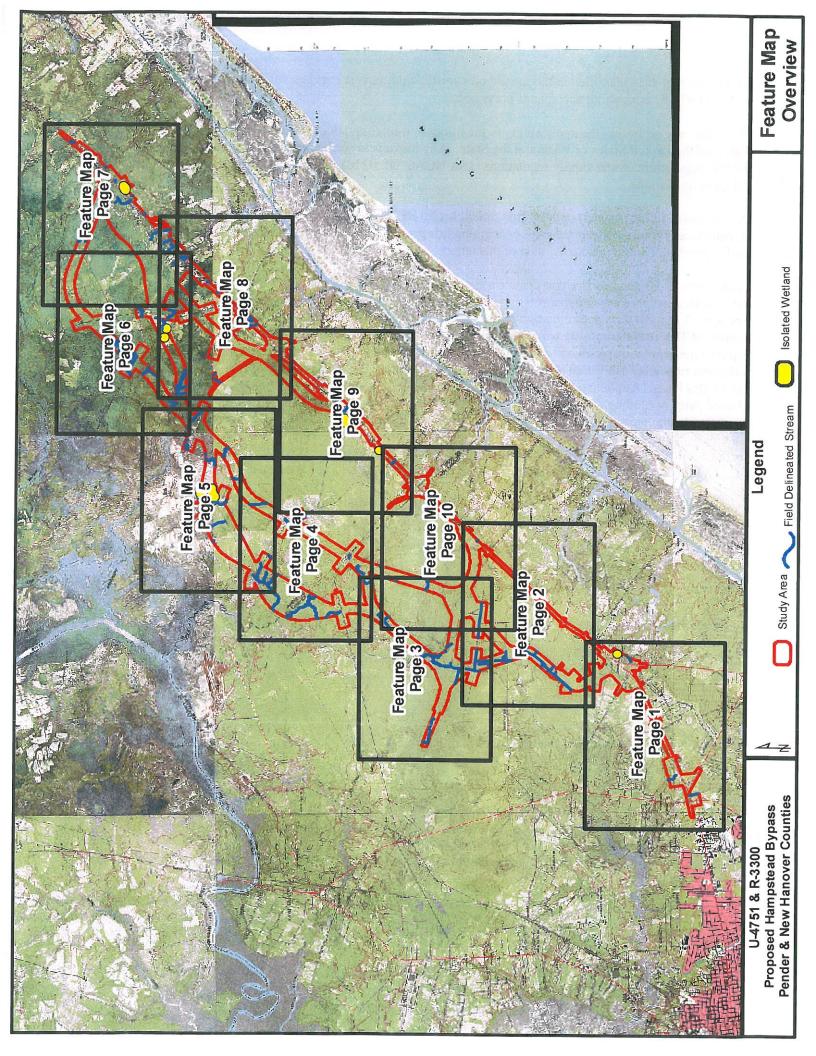
P 4

		DKAINAG	EFEATUR	ES TABLE (continu	lea)	
NUMBER	ATTACHED FEATURE MAP PAGE	JD PACKET FIGURE	FEATURE ID	JURISDICTIONAL STATUS *	MITIGATION REQUIRED	ON USGS MAP
127	7	3-9	NICE	Intermittent	Yes	No
128	7	3-9	NSF	Perennial	Yes	No
129	7	3-1	NDITCH1	Tributary	No	No
130	1, 2, 10	3-4	ZSA	Intermittent	Yes	No
131	9, 10	3-5	ZSB	Perennial	Yes	No
132	8	3-7	ZSC	Tributary	No	No
133	8	3-7	ZSC	Intermittent	Yes	No
134	8	3-8	ZSD	Perennial	Yes	No
135	8	3-13	700	Tributary	No	No
136	8	3-13	ZSE	Intermittent	Yes	No
137	2, 10	3-4	ZSF	Intermittent	Yes	No
138	2	3-3	ZSG	Perennial	Yes	No
139	1	3-1	ZSH	Perennial	Yes	Yes
140	7	3-9	ZSJ	Tributary	No	No
141	3	3-21	ZSK	Perennial	Yes	No
142	3	3-21	ZSL	Perennial	Yes	No
143	6, 7, 8	3-8	ZSM	Intermittent	Yes	No
144	8	3-7	ZDITCH1	Tributary	No	No
145	8	3-7	ZDITCH2	Tributary	No	No
146	8	3-7	ZDITCH3	Tributary	No	No
147	8	3-7	ZDITCH4	Tributary	No	No
148	8	3-7	ZDITCH5	Tributary	No	No
149	8	3-8	ZTRIB1	Tributary	No	No
150	8	3-13	ZTRIB2	Tributary	No	Yes

^{*} Features labeled as "Tributaries" were classified as ditches and/or rated ephemeral; therefore no mitigation is required by the DWQ. This term was retained to be consistent with the JD package.

In addition to the drainage features listed above, the following isolated wetlands were also identified:

	ISOLATED WETLANDS TABLE					
NUMBE	ATTACHED FEATURE MAP	JD PACKET FIGURE	FEATURE	DELINEATED SIZE (acres)		
1	9	6	EWP	0.39		
2	9	6	EWQ	0.07		
3	9	6	EWR	0.44		
4	9	6	EWS	0.13		
5	5	18	HWH	0.15		
6	5	18	HWH1	0.09		
7	5	18	HWH2	0.03		
8	5	18	HWH3	0.07		
9	5	18	HWH4	0.02		
10	5	18	HWH5	0.23		
11	5	18	HWH6	0.10		
12	5	18	HWI	0.02		
13	5	23	HWJ	0.03		
14	5	23	HWK	1.05		
15	5	23	HWL	0.32		
16	5	23	HWL1	0.06		
17	5	23	HWP	0.26		
18	6, 8	14	LWH	0.20		
19	6, 8	14	LWJA	0.16		
20	7	9	NWN	1.64		
21	9	5	ZWK	0.08		
22	9	6	ZWM	0.04		
23	1	2	ZWY	0.08		



Please note that sites identified in the jurisdiction verification request package but not reviewed on site by NCDWQ will be considered accurate as presented.

This letter only addresses the applicability to the mitigation rules and does not approve any activity within Waters of the United States or Waters of the State. Any impacts to wetlands or streams must comply with 404/401 regulations, water supply regulations (15A NCAC 2B .0216), and any other required federal, state and local regulations.

The owner (or future owners) or permittee should notify NCDWQ (and other relevant agencies) of this decision in any future correspondences concerning this property and/or project. This on-site determination shall expire five (5) years from the date of this letter.

Landowners or affected parties that dispute a determination made by NCDWQ or Delegated Local Authority that a surface water exists and that it is subject to the mitigation rules may request a determination by the Director. A request for a determination by the Director shall be referred to the Director in writing c/o Brian Wrenn, NCDWQ Wetlands/401 Unit, 1650 Mail Service Center, Raleigh, NC 27699-1650. Individuals that dispute a determination by NCDWQ or Delegated Local Authority that "exempts" a surface water from the mitigation rules may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. Applicants are hereby notified that the 60-day statutory appeal time does not start until the affected party (including downstream and adjacent landowners) is notified of this decision. NCDWQ recommends that the applicant conduct this notification in order to be certain that third party appeals are made in a timely manner. To ask for a hearing, send a written petition, which conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This determination is final and binding unless you ask for a hearing within 60 days.

If you have any additional questions or require additional information please contact David Wainwright at (919)715-3415 or David.Wainwright@ncdenr.gov.

Sincerely,

David Wainwright

DWQ, Transportation Permitting Unit

Attachments: Signed and Dated Feature Map Pages 1-10

cc: Brad Shaver, US Army Corps of Engineers – Wilmington Regulatory Field Office Jay McInnis, NCDOT, Project Development Mason Herndon, NCDWQ Fayetteville Regional Office File Copy

P.02/03

MONTH CHEOTITA STATE CHEMITHRESOOSE DEPARTMENT OF ADMINISTRATION intergovernmental review

STATE NUMBER: 06-E-4220-0107

F02

DATE RECEIVED: 10/10/2005 AGENCY RESPONSE: 11/07/2005

REVIEW CLOSED: 11/10/2005

CLEARINGHOUSE COORD REGION O CAPE FEAR COG 1486 HARBOUR DRIVE WILMINGTON NO

REVIEW DISTRIBUTION CAPE FEAR COG CC&PS - DEM, NFIP DEHNR - COASTAL MGT DENR LEGISLATIVE AFFAIRS DEPT OF AGRICULTURE DEPT OF CUL RESOURCES DEPT OF TRANSPORTATION

PROJECT INFORMATION

APPLICANT: N.C. Department of Transporation

TYPE: National Environmental Policy Act

ERD: \$coping

DESC: Military cutoff extension from US 17 (Market Street) to the proposed I-140 in New Hanover County & US 17 bypass of Hampstead in New Hanover & Fender counties.

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT	OF THIS REVIEW THE FOLLOWING IS SUBMITTED:
	NO COMMENT
	COMMENTS ATTACHED
SIGNED BY:	Mik To
DATE:	10/10/05

P.02/03

DEPARTMENT OF ADMINISTRATION INTERGOVERNMENTAL REVIEW

STATE NUMBER: 06-E-4220-0107

F02

DATE RECEIVED: 10/10/2005

AGENCY RESPONSE: 11/07/2005

REVIEW CLOSED: 11/10/2005

CLEARINGHOUSE COORD REGION O

CAPE FEAR COG

1480 HARBOUR DRIVE

WILMINGTON NC

REVIEW DISTRIBUTION

CAPE FEAR COG

CC4PS - DEM, NPIP

DEHNR - COASTAL MGT

DENR LEGISLATIVE AFFAIRS

DEPT OF AGRICULTURE

DEPT OF CUL RESOURCES

DEPT OF TRANSPORTATION

PROJECT INFORMATION

APPLICANT: N.C. Department of Transporation

TYPE: National Environmental Policy Act

ERD: Scoping

DESC: Military cutoff extension from US 17 (Market Street) to the proposed I-140 in New

Hanover County & US 17 bypass of Hampstead in New Hanover & Pender counties.

RECEIVED

Secretary's Office DOA

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:
NO COMMENT
COMMENTS ATTACHED
SIGNED BY: All Supples
DATE: 10/20/05
1



NEW HANOVER COUNTY

Engineering Department / Water and Sewer District 230 Market Place Drive • Suite 160 Wilmington, North Carolina 28403 Telephone (910) 798-7139

Fax (910) 798-7051

Gregory R. Thompson, P.E., P.L.S.

County Engineer

James S. Craig, P.E.

Deputy County Engineer

RECEIVED DIVISION ENGINEER THIRD DIVISION

JUL 20 2005

July 18, 2005

Const. Maint.
Opr. Mgr. Pairs. Tech.
Bus. Ofc. Styr. Supr.
Others

Division of Highways

i postalnik urbis

H. Allen Pope, P.E.
Division Engineer
Highway Division 3
North Carolina Department of Transportation
124 Division Drive
Wilmington, North Carolina 28401

Man with the married of the second of

RE: Alignment of Proposed Military Cutoff Road Extension at New Hanover County Well Field and Water Treatment Plant Site.

Dear Mr. Pope: A Try

New Hanover County developed a well field and is in design phase of a water treatment plant at County owned property in Ogden adjacent to Diane Drive (parcel R03600-003-187-000). Currently, there are two new wells on the property and contract award is pending to connect the wells to our water system by construction of a 16-inch water line. One of these wells now appears to be in the path of the proposed corridor of the Military Cutoff Road Extension.

The well construction contract cost was \$45,000 in 2004 (not including mobilization, connection and associated improvement costs). Ali Koucheki, NCDOT Utilities Engineer Design Services Unit and Greg Stevens, P.E. NCDOT Utilities Squad Leader Project Services Unit previously indicated that it might be possible to adjust the alignment to miss the 100 foot radius wellhead protection zone around the well. Given recent information regarding the proposed road alignment and corridor width, the well will need to be properly abandoned and replaced prior to road construction under the NC DOT Military Road Extension Project.

Additional conflicts with New Hanover County and Sewer District utility assets (water and sewer lines, etc.) are anticipated given the scope of the Road Extension project. Please forward this letter to the appropriate authorities in NC DOT so that

funds will be programmed and available to offset the cost of restoring all New Hanover County Water and Sewer District assets impacted by the project.

Thank you for your cooperation in this matter. I can be reached for questions at (910 798-7079.

Sincerely,

Gary D. McSmith, P.E.

Project Engineer

New Hanover County

cc: Greg Thompson, P.E.

Greg Stevens, P.E., NC DOT Utilities Squad Leader

Ali Koucheki, NC DOT, Design Services Unit



NEW HANOVER COUNTY

Engineering Department / Water and Sewer District
230 Market Place Drive • Suite 160
Wilmington, North Carolina 28403
Telephone (910) 798-7139
Fax (910) 798-7051

Gregory R. Thompson, P.E., P.L.S.

County Engineer

James S. Craig, P.E.

Deputy County Engineer

October 18, 2005

Jay McInnis, P.E.
Project Development Unit Head
1548 Mail Service Center
North Carolina Department of Transportation
Raleigh, North Carolina 27699-1548

RE: Access (limited) from Military Cutoff Road Extension to New Hanover County Well Field and Water Treatment Plant Site. (NCDOT U-4751, NHC Project #185.1)

Dear Mr. McInnis:

Thank you for providing input during our telephone discussion today regarding direct access from the future Military Cutoff Road Extension to the New Hanover County well field and water treatment plant site. The Military Cutoff Road Extension corridor crosses the northwest portion of this County-owned property (parcel R03600-003-187-000). As we discussed, limited access (right in, right out) would be beneficial to the water treatment plant project. This arrangement would also meet the intent of the highway project because it would relieve U.S. 17 (Market Street) from plant related delivery and service traffic.

New Hanover County respects the public review process for the Military Cutoff Road Extension. We understand that your conceptual agreement to provide limited access to the plant site is contingent upon any changes to the project necessitated by this upcoming public comment period. Thank you for your cooperation in this matter. I can be reached at (910) 798-7079.

Sincerely,

ADN'Solk

Gary D. McSmith, P.E. Chief Project Engineer

New Hanover County

cc: William Castor, New Hanover County Commissioner

Greg Thompson, P.E., New Hanover County Engineer

Allen Pope, P.E., NC DOT Division Engineer

Dan Dawson, P.E., W. K. Dickson



RESOLUTION IN SUPPORT OF THE HIGHWAY 17 HAMPSTEAD BYPASS PROJECT

WHEREAS, Pender County has been reported as the 85th fastest growing county in the nation and the 6th fastest growing county in North Carolina; and

WHEREAS, the population of Pender County increased by 42% from 1990 to 2000, and projections are for the increase in the next decade to exceed another 50%.

WHEREAS, the a vast majority of County's growth has occurred in the Hampstead area, where over 60% of the County's building permits were issued in 2006; and

WHEREAS, The N.C. Department of Transportation has proposed 19 alternate routes for this highway bypass project, 17 of which pass through Pender County; and

WHEREAS, the County has limited resources available to prevent development in and to preserve any of the designated alternate routes; and

WHEREAS, this Board of Commissioners does not believe, based on the volume of subdivision applications, rezoning requests and special use permit applications pending for the Hampstead area, that the County can responsibly preserve this area from development for the next two (2) years.

NOW, THEREFORE, BE IT RESOLVED that the Pender County Board of Commissioners urges the North Carolina Department of Transportation to work with the residents of the County and to hasten the selection process of the Hampstead Bypass Corridor, while ensuring this project receives adequate funding as a priority improvement.

FURTHER BE IT RESOLVED that copies of this resolution be transmitted to the members of the General Assembly representing Pender County.

Adopted this the 7th day of May, 2007

F.D. Rivenbark, Chairman

Lori A. Brill, Clerk to the Board



RESOLUTION REGARDING THE STATE TRANSPORTATION IMPROVEMENT PROGRAM

WHEREAS, Pender County has been reported as the 85th fastest growing county in the nation and the 6th fastest growing county in North Carolina; and

WHEREAS, the population of Pender County increased by 42% from 1990 to 2000, and projections are for the increase in the next decade to exceed another 50%.

WHEREAS, the a vast majority of County's growth has occurred in the Hampstead area, where over 60% of the County's building permits were issued in 2006; and

WHEREAS, the Department of Transportation is currently accepting comments on the Draft 2009-2015 State Transportation Improvement Program (TIP); and

WHEREAS, the Draft STIP does not add any additional projects for Pender County, but the existing 2007-2013 STIP currently includes the Hampstead Bypass project; a project that has clearly become increasingly important due to traffic congestion, which creates a public safety concern; and

WHEREAS, the public safety concerns and traffic volume will continue to increase with the opening of the new Topsail High School, the addition of another elementary school, and the construction of numerous housing developments whose residents will rely on Highway 17 as their primary transportation corridor; and

WHEREAS, Highway 17 is a major transportation and economic corridor for Eastern Carolina from the South Carolina border to Virginia; and

NOW, THEREFORE, BE IT RESOLVED that the Pender County Board of Commissioners urges the North Carolina Department of Transportation to 1) fully fund and accelerate the Hampstead Bypass project; 2) Fund a study of the Highway 17 Corridor; and 3) explore alternatives to improve safety before the bypass can be constructed other than the 6-laning of Highway 17.

FURTHER BE IT RESOLVED that copies of this resolution be transmitted to the members of the General Assembly representing Pender County.

Adopted this the 22nd day of January, 2008

J. David Williams, Chairman

Lori A. Brill, Clerk to the Board

votro | Crosed

46032

8-3-05

RECEIVED

JUL 1 9 2005



Development Services Engineering 305 Chestnut Street PO Box 1810 Wilmington, NC 28402-1810





N.C. DEPT, OF TRANSPORTATION
OFFICE OF THE SECRETARY

July 15, 2005

Mr. Lyndo Tippett Secretary of Transportation North Carolina Department of Transportation 1501 Mail Service Center Raleigh, NC 27699-1501

Re: Transportation Corridor Official Map for Military Cutoff Road Extension

Dear Mr. Tippett:

The City of Wilmington entered into a municipal agreement with the North Carolina Department of Transportation to prepare and file the Transportation Corridor Official Map for the proposed extension of Military Cutoff Road from Market Street to the proposed I-140/US17 Bypass. The New Hanover County Commissioners voted to approve the City preparing and filing the map at their February 7, 2005 meeting. The City entered into a contract with The LPA Group of North Carolina to prepare the map shortly after this approval.

The map has been prepared and a public hearing has been scheduled for August 2, 2005 at the City Council's regularly scheduled meeting. The meeting begins at 6:30 PM in the City Council Chamber, City Hall, 102 N. Third Street. The public hearing is being advertised in the Star News (the local paper) and letters are being mailed to affected property owners informing them of the public hearing. In addition, a copy of the map has been posted at the door of the New Hanover County Court House in accordance with the North Carolina General Statutes. I am enclosing a reduced size copy of the map for you information.

Please feel free to contact me if you have any questions.

Sincerely,

William C. Penny, PE

City Engineer

CC: Lanny Wilson

Allen H. Pope, PE



WILMINGTON URBAN AREA Metropolitan Planning Organization

P.O. Box 1810 Wilmington, North Carolina 28402 910 341 3258 910 341 7801 FAX

Members:

October 18, 2005

City of WILMINGTON Lead Planning Agency

Town of CAROLINA BEACH

Town of KURE BEACH

Town of WRIGHTSVILLE BEACH

NEW HANOVER County

Town of BELVILLE

Town of LELAND

Town of NAVASSA

BRUNSWICK County

North Carolina BOARD OF TRANSPORTATION Ms. Beverly Robinson

North Carolina Department of Transportation

Project Development and Environmental Analysis Branch

1548 Mail Service Center

Raleigh, North Carolina 27699-1548

Subject: Military Cutoff Road Extension (U-4751) and Hampstead

Bypass (R-3300)

The North Carolina Department of Transportation Project Development and Environmental Analysis Branch is working to assemble comments for the proposed Military Cutoff Extension (U-4751) and Hampstead Bypass (R-3300) projects located in New Hanover and Pender Counties.

Although no permits will be required from the Wilmington Metropolitan Planning Organization, the proposed Military Cutoff Extension project and a portion of the Hampstead Bypass project are located within the Wilmington MPO's planning area boundary. Additionally, the Wilmington MPO is exploring the option of expanding the current boundary to encompass the entire Hampstead Bypass and unincorporated area of Hampstead. For these reasons, I would like to participate in the scoping meeting and environmental review process for the Military Cutoff Extension and Hampstead Bypass projects.

If you have any questions, please contact me via e-mail at mike.kozlosky@wilmingtonnc.gov or by phone at (910) 342-2781.

Sincerely,

Mike Kozlosky

Sr. Transportation Planner



WILMINGTON URBAN AREA Metropolitan Planning Organization

P.O. Box 1810 Wilmington, North Carolina 28402 910 341 3258 910 341 7801 FAX

February 28, 2007

Members:

Mr. Rob Hanson

City of WILMINGTON

North Carolina Department of Transportation

WILMINGTON Lead Planning Agency Project Development and Environmental Analysis Branch

Town of

1548 Mail Service Center Raleigh, NC 27699-1548

CAROLINA BEACH

Re:

Request for a multi-use path as part of the Military Cutoff Road Extension (U-4751)

Town of KURE BEACH projec

Town of WRIGHTSVILLE BEACH Dear Mr. Hanson:

NEW HANOVER

The Military Cutoff Extension is currently programmed in the State Transportation Improvement Program (STIP) for *Planning and Environmental Analysis* with funding for right-of-way acquisition in fiscal year 2012 and construction in post year. Military Cutoff Road extension is identified as a "recommended boulevard" on Governor Easley's and the North Carolina Department of Transportation's (NCDOT's) Strategic Highway Corridor's Initiative and is important to the future

County

mobility of the region.

Town of BELVILLE

As part of the Military Cutofff Road widening project (U-2734) that is currently under construction, NCDOT will construct a multi-use path within the existing right-of-way. A goal of the 2030 Long Range Transportation Plan is to provide "a continuous and direct system of regional bicycle facilities within the Greater Wilmington Urban Area." The MPO's Transportation Advisory Committee endorsed staff to request the "East Coast Greenway Coastal Corridor" designation on Military Cutoff Road between Wrightsville Avenue and Market Street. The construction of a multi-use path along Military Cutoff Road extension would provide for a continuous and direct regional bicycle facility, could potentially be designated as part of the East Coast NC Greenway Coastal Corridor and would provide

Town of LELAND

Town of

NAVASSA

BRUNSWICK County

an important future connection between the cities of Wilmington and Jacksonville.

PENDER County

The Wilmington MPO requests that the NCDOT Planning, Development and Environmental Analysis Branch consider the construction of a multi-use path as part of the Military Cutoff Road extension project (U-4751). If you have any questions regarding this request or require any additional information, please contact me via e-mail at <a href="mileo-mile

CAPE FEAR
Public Transportation
Authority

Sincerely,

North Carolina BOARD OF TRANSPORTATION

Mike Kozlosky

Senior Transportation Planner

cc:

Lanny Wilson, TAC Chairman, Wilmington MPO Allen Pope, Division Engineer, NCDOT

APPENDIX C NEPA/SECTION 404 CONCURRENCE FORMS

SECTION 404/NEPA INTERAGENCY AGREEMENT

CONCURRENCE POINT No. 1 PURPOSE AND NEED

PROJECT TITLE: US 17 Corridor Study, New Hanover and Pender Counties, TIP Nos. U-4751 and R-3300, State Project No. 40191.1.1.

PURPOSE AND NEED OF THE PROPOSED ACTION: The purpose of the project is to improve the traffic carrying capacity and safety of the US 17 and Market Street corridor in the project area.

STUDY AREA: The proposed study area is located within portions of northern New Hanover County and southern Pender County. It is roughly bounded on west by I-40, on the north by the Northeast Cape Fear River, Holly Shelter Gamelands to the east, and US 17 to the south.

The project team has concurred with the purpose and need for the proposed project as described above.

<u>Name</u>	AGENCY	DATE
Jen S. A. Fry	USACE	21 Aept. 2000
3 hh	NCDWQ	9/21/206
Olivir /. Fan	NCDOT	9-21-06
Ch HA.	USEPA	9/2/106
5-1/1/25	NCWRC	9-21-06
Day Jordan	USFWS	9/21/2006
Afand Wand	NCSHPO	9-21-06
Morue	NCDCM	9/21/06
	NCDMF	
Mul F	WMPO	9/21/06

SECTION 404/NEPA INTERAGENCY AGREEMENT CONCURRENCE POINT No. 2 DETAILED STUDY ALTERNATIVES CARRIED FORWARD

PROJECT TITLE: US 17 Corridor Study, New Hanover and Pender Counties, TIP Nos. U-4751 (Hampstead Bypass) and R-3300 (Military Cutoff Road Extension), State Project No. 40191.1.1.

PURPOSE AND NEED OF THE PROPOSED ACTION: The purpose of the US 17 Corridor Study is to improve the traffic carrying capacity and safety of the US 17 and Market Street corridor in the project area.

ALTER	NATIVES TO STU	OY IN DE	ETAIL:			
1.	Combined Alt. D-G	X Yes	☐ No	11. Alternative P	\boxtimes Yes	☐ No
2.	Combined Alt. E-H	X Yes	☐ No	12. Alternative Q	🔀 Yes	☐ No
3.	Combined Alt. F-I	X Yes	☐ No	13. Alternative R	\boxtimes Yes	☐ No
4.	Alternative G	Yes	No No	14. Alternative S	🔀 Yes	☐ No
5.	Alternative H	Yes	⊠ No	15. Alternative U	\boxtimes Yes	☐ No
6.	Alternative I	Yes	No No	16. Alternative Z	\boxtimes Yes	☐ No
7.	Alternative M1	X Yes	☐ No	17.	Yes	☐ No
8.	Alternative M2	X Yes	No No	18.	Yes	☐ No
9.	Alternative N	X Yes	☐ No	19.	Yes	☐ No
10.	Alternative O	X Yes	☐ No	20.	Yes	☐ No
				· ·		

The project team has concurred with the alternatives to be carried forward for the proposed project as indicated above. Segments B and C west of NC 210 were combined into one Segment, resulting in the combination of Alternatives D and G, E and H, and F and I. Segment H was revised to connect between Segments E and B/C south of the New Hanover County line.

NAME	AGENCY	DATE
Jean & J.	USACE	8/23/07
In Plum A	NCDWQ	8/23/67
Olivia/ Fan	NCDOT	8-23-07
Out An -	USEPA	8/23(07
5-7/. 200	NCWRC	8-23-07
Hang Jordan	USFWS	8/23/2007
	NCSHPO	
Mopule	NCDCM	8/23/07
,	NCDMF	,
me 25	WMPO	8/23/07
		,

SECTION 404/NEPA INTERAGENCY AGREEMENT CONCURRENCE POINT NO. 2 DETAILED STUDY ALTERNATIVES CARRIED FORWARD

PROJECT TITLE: US 17 Corridor Study, New Hanover and Pender Counties, TIP Nos. U-4751 (Hampstead Bypass) and R-3300 (Military Cutoff Road Extension), State Project No. 40191.1.1.

PURPOSE AND NEED OF THE PROPOSED ACTION: The purpose of the US 17 Consider Study is to improve the traffic carrying capacity and safety of the US 17 and Market Street consider in the project area.

ALTER	NATIVES TO STU	DY IN DE	TAIL:				
1.	Alternative D-G	Yes	⊠ No	8.	Alternative R	X Yes	☐ No
2.	Alternative E-H	X Yes	☐ No	9.	Alternative S	Yes	⊠ No
3.	Alternative F-I	Yes	⊠ No	10.	Alternative U	∑ Yes	☐ No
4.	Alternative N	Yes	⊠ No	11.	Alternative Z	Yes	No No
5.	Alternative O	X Yes	No	12.	Alternative M1	∑ Yes	□ No
6.	Alternative P	Yes	⊠ No	13.	Alternative M2	∑ Yes	☐ No
7.	Alternative Q	Yes	⊠ No				

The project team has concurred with the alternatives to be carried forward for the proposed project as indicated above. This Concurrence Point 2 form supersedes the Concurrence Point 2 form signed on August 23, 2007.

NAME	AGENCY	DATE
Bred Sharl	USACE	4/29/10
Cluting A Di	USEPA	4/20/10
Harry Jordan	USFWS	4/26/2010
Ron Sechler	NMF	6/22/10
torue_	NCDCM	6/22/10
Rence Gledhill-Early	NCSHPO	4/29/10
Jessi O'Nowl	NCDMF	5/26/10
Said When to	NCDWQ	4/20/10
5=2/205	ncwrc	4-20-10
Elina / Fan	NCDOT	4-20-2010
ners	WMPO	4/20/10
		/

SECTION 404/NEPA INTERAGENCY AGREEMENT CONCURRENCE POINT NO. ZA BRIDGING AND ALIGNMENT REVIEW

PROJECT TITLE: US 17 Corridor Study, New Hanover and Pender Counties, TIP Nos. U-4751 (Military Cutoff Road Extension) and R-3300 (Hampstead Bypass), State Project No. 40191.1.1.

PURPOSE AND NEED OF THE PROPOSED ACTION: The purpose of the US 17 Corridor Study is to improve the traffic carrying capacity and safety of the US 17 and Market Street corridor in the project area.

HYDRAULIC RECOMMENDATIONS:					
Site No.	Stream Name (I.D.)/Wetland I.D.	Wetland I.D.	Hydraulic Structure		
1	U'I' Futch Creek (ZSB)	EWF	Retain & extend existing 1@12'x8'		
2	white the second	KWD	1@9'x8' RCBC		
3	UT Smith Creek (BSP)	BWI	2@7'x12' RCBC		
4	e e e e e e e e e e e e e e e e e e e	DWC	1@9'x8' RCBC		
5	and the second s	GWA	3@12'x7' RCBC		
6	UT Island Creek (ISA, ISB)	IWN	Minimum Hydraulic Bridge		
7	UT Harrisons Creek (ISD)	IWF	3@11'x8' RCBC		
8	Harrisons Creek (LSC, LSCC, LSCF)	LWD	Dual 565' long bridges or culvert		
10	UT Island Creek (CSA, FSA)		1@12211' RCBC Minimum Hydraulic Pipe		
11	UT Island Creek (FSH, FSI)	mam.	1@12'x9' RCBC		
15	Island Creek, UT Island Cr. (HBSF, HBSH)	HBWK	Minimum Hydraulic Bridge		
16	UT Island Creek (HBSD2)	HBWD	Dual 200' long bridges		
17	UT Harrisons Creek (HSX)	HWB	3@10'x9' RCBC		
21	UT Island Creek (FSA)	FWB	2@11'x9' RCBC		
22	UT Island Creek (FSE)	FWC	2@12'x7' RCBC		
23	Godfrey Creek (LSD)	LWI	2@ 9'x7' RCBC		
25	UT Island Creek (HBSC)	HBWF	1@9'x8' RCBC		

The project team has concurred on the major hydraulic structures and sizes for the proposed project as listed above.

	NAME	AGENCY	DATE
	Brod 1 Shows	USACE	5/27/10
(:	elpi Di	USEPA	5/27/10
	Hary Jordan	USFWS	5/27/2010
	\ 0	NAIF	
	topu c	NCDCM	6/22/10
	Caree 121 odli 0180 Dry	NCSHPO	6/32/10
**	Jessi O'neal	NCDMIF	6/24/10
	Parif Wai of	NCDWQ	5/27/10
	500 Al AV	NCWRC	5-27-2010
	Mini Jan	NCDOT	5-21-2010
	mes -	WAIPO	7/9/10
			/ /

SECTION 404/NEPA INTERAGENCY AGREEMENT

CONCURRENCE POINT NO. 3 LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE (LEDPA)

PROJECT TITLE AND PROJECT NUMBERS:

Proposed SR 1409 (Military Cutoff Road) Extension and Proposed US 17 Hampstead Bypass, New Hanover and Pender Counties

TIP Nos. U-4751 (Military Cutoff Road Extension) and R-3300 (Hampstead Bypass) State Project No. 40191.1.2, Corps Action ID 2007 1386

PURPOSE AND NEED OF THE PROPOSED ACTION:

The purpose of the US 17 Corridor Study is to improve the traffic carrying capacity and safety of the US 17 and Market Street corridor in the project area.

LE	AST ENVIRONMENTA	LLY DA	MAGING	PRACT	ICABLE	ALTERNATI	VE (LEC	PA):
1.	Alternative M1+E-H	X Yes	☐ No	4.	Alternati	ve M1+U	Yes	
2.	Alternative M2+O	Yes	No No	5.	Alternati	ve M2+U	Yes	No

2. Alternative M2+O ☐ Yes ☒ No 3. Alternative M1+R ☐ Yes ☒ No

The project team has concurred on the LEDPA for the proposed project as listed above.

NAME	AGENCY	DATE
Bred Ethank	USACE	5.17.2912
Λ	USEPA	
Jany Johan	USFWS	5/17/2012
Zint Rohde for Ron Sech	le- NMF	6/8/1012
Mohne	NCDCM	5/17/12
Rence Gledhill-Earley	NCSHPO	5-17-12
0	NCDMF	
Dand Whin A	NCDWQ	5-17-12
5-2/2	NCWRC	5-17-2012
ally Xin Gillegrie	NCDOT	5/17/2012
me X	WMPO	5/17/12
		, ,

SECTION 404/NEPA INTERAGENCY AGREEMENT

CONCURRENCE POINT NO. 3 LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE (LEDPA)

PROJECT TITLE AND PROJECT NUMBERS:

Proposed SR 1409 (Military Cutoff Road) Extension and Proposed US 17 Hampstead Bypass, New Hanover and Pender Counties

TIP Nos. U-4751 (Military Cutoff Road Extension) and R-3300 (Hampstead Bypass) State Project No. 40191.1.2, Corps Action ID 2007 1386

PURPOSE AND NEED OF THE PROPOSED ACTION:

The purpose of the US 17 Corridor Study is to improve the traffic carrying capacity and safety of the US 17 and Market Street corridor in the project area.

LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE (LEDPA):

2.	Alternative M1+E-H Alternative M2+ O Alternative M1+R	⊠ Yes □ Yes □ Yes	⊠ No		Alternative M1+U Alternative M2+U	☐ Yes ☐ Yes	
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The project team has concurred on the LEDPA for the proposed project as listed above.

NAME	AGENCY	DATE
Bry Ethank	USACE	5-17.2012
SEE ATTACHED MEMO CA	— USEPA	6/6/12
Low John	USFWS	5/17/2012
V 10 . Security to the second	NWI:	1
Ato All La	NCDCM	5/17/12
Rene Gledhill-Early	NCSHPO	5-17-12
Jessi Baker	NCDMF	5/29/12
Charle Whing	NCDWQ	5-17-12
5 3/4/	NCWRC	5-12-2012
Wity Kin Dillegair	NCDOT	5/17/2012
and X	WMPO	5/17/12
	ner en	n 100 controller commentation production of the controller of the

MEMORANDUM

To: Brad E. Shaver, U.S. Army Corps of Engineers, Wilmington District

David Wainwright, N.C. Division of Water Quality

Jay McInnis, North Carolina Department of Transportation

Cc: NEPA/Section 404 Merger Team Agency Representatives

Jeffrey Garnett, U.S.E.P.A. Water Division

THRU: Heinz J. Mueller, U.S.E.P.A. NEPA Program Office

From: Christopher A. Militscher, U.S.E.P.A. Merger Team Representative

RE: U-4751/R-3300, Military Cutoff Road Extension/US 17 Hampstead Bypass, Pender and New Hanover Counties; Concurrence Point 3 – LEDPA

I have reviewed the Conceptual Mitigation Plan (CMP) dated June of 2012 by the North Carolina Department of Transportation (NCDOT) as was requested by the U.S.E.P.A. in its November 15, 2011, letter on the Draft Environmental Impact Statement (DEIS).

Based upon past NCDOT supplemental information regarding the Cape Fear Public Utilities Authority Wellhead Protection Area (CPFUA-WPA) and avoidance and minimization measures proposed by NCDOT, I conditionally concur with the selection of Alternative M1 for TIP Project No. U-4751 as the LEDPA. This concurrence is conditioned on final designs, final avoidance and minimization measures, and the identified environmental commitments made by NCDOT. Potential impacts to CFPUA current and future water supplies need be avoided in accordance with 33 CFR 320.4(m) and Section 101(g) of the Clean Water Act.

Based upon the CMP provided, the discussions during the CP 3 meeting held on May 17, 2012, and other environmental concerns identified by the U.S.E.P.A. in the November 15, 2011, letter, I abstain from concurring on Alternative E-H as the LEDPA for TIP Project No. R-3300. Based upon the CMP, stream mitigation sites are still "under construction" and there are no assurances that adequate credits to compensate for Alternative E-H stream impacts will be available at the time of permit applications. The CMP does not identify any other transportation project mitigation needs in the two HUCs. EPA will be requesting that final mitigation plans comply with the 2008 Federal Compensatory Mitigation Rule (33 CFR Parts 325 and 332 and 40 CFR Part 230).

I plan to continue participation in the NEPA/Section 404 Merger team process. Thank you.

Section 404/NEPA Interagency Agreement

Concurrence Point No. 4a Avoidance and Minimization

Project Title and Project Numbers:

Proposed SR 1409 (Military Cutoff Road) Extension, New Hanover County, TIP No. U-4751, State Project No. 40191.1.2, Corps Action ID 2007 1386

LEDPA/Recommended Alternative:

Military Cutoff Road Extension Alternative M1

Avoidance and Minimization:

Military Cutoff Road Extension Alternative M1 minimizes impacts to resources. However, it is not feasible for the proposed project to completely avoid impacts to the Waters of the US and still meet the purpose and need of the project. The following avoidance and minimization efforts have been incorporated into the proposed project:

Section 404 Avoidance and Minimization Measures

- 3:1 slopes are proposed in wetland areas and adjacent to streams.
- Loops and ramps in the Military Cutoff Road Extension interchange at Market Street were tightened, reducing wetland impacts by 0.89 acre [BWD -0.19 acre, ZWY -0.04 acre, PD-04 -0.66 acre].
 Impacts to BDITCH1 were reduced by 1,911 square feet.
- A retaining wall was added on the west side of the proposed roadway south of Putnam Drive to avoid impacts to wetland PD-01 (-0.07 acre).
- Military Cutoff Road Extension north of Torchwood Boulevard was realigned in the vicinity of the Cape Fear Public Utility Authority's Nano Water Treatment Plant. Wetland impacts were reduced by 0.78 acre [BWI] and stream impacts were reduced by 677 feet [BSO -560 feet and BSP -117 feet].
- The U-turn bulb adjacent to wetland CWA just north of the Cape Fear Public Utility Authority property will be shifted southward out of Wetland CWA, reducing wetland impacts by 0.10 acre.
- The design was revised at the Military Cutoff Road Extension interchange with the US 17 Wilmington Bypass. The ramp in Quadrant D was pulled in, reducing wetland impacts by 1.16 acres [CWF -1.10 acres, DWC -0.06 acre]. Impacts to the Plantation Road Site were reduced by 0.02 acre and impacts to the Corbett Tract Residual Strip were reduced by 0.07 acre.

Additional Avoidance and Minimization

Wells

 The original design of proposed Military Cutoff Road Extension Alternative M1 would have relocated two water supply wells operated by the Cape Fear Public Utility Authority (CFPUA).

- These wells are located on the east side of the proposed roadway north of Torchwood Boulevard on the Nano Water Treatment Plant property. The alternative was realigned in this area to avoid these wells and minimize impacts to the CFPUA groundwater water supply infrastructure.
- Prior to the completion of the final environmental document for the project, NCDOT will meet with the CFPUA, local fire departments and other appropriate agencies to discuss additional protection measures for the wellhead protection area. Measures requiring NCDOT participation will be identified in the project commitments.
- NCDOT will coordinate with the CFPUA on the potential inclusion of a sign on Military Cutoff Road Extension identifying the water supply area.
- Well locations and a 100-foot buffer around the wells will be depicted on final constructions plans for Military Cutoff Road Extension. The Special Provisions within the final design plans will include a requirement for the contractor's to educate their employees that project construction is occurring within a wellhead protection area.
- NCDOT will coordinate with CFPUA on utility impacts resulting from the proposed project.

Water Quality and Erosion Control

Howe Creek is designated an Outstanding Resource Water (ORW) by the North Carolina Division of Water Quality (DWQ). Tributaries of this stream (BDITCH1) are designated ORW due to the classification of their receiving waters. Design Standards in Sensitive Watersheds will be implemented for BDITCH1 during project construction.

Residential and Business Relocations

- Control of access was reduced along Market Street both north and south of the Military Cutoff Road Extension interchange to minimize impacts to properties on Market Street. Loops and ramps in the interchange were tightened. A new relocation report and right of way cost estimate will be prepared and included in the FEIS. It is expected that the design modifications will result in eight fewer residential relocations and 33 fewer business relocations.
- The southeast quadrant (Loop D) of the Military Cutoff Road Extension and Market Street interchange was realigned to the west to minimize impacts to Covil Crossing, a residential area.
- Multiple interchange configurations were reviewed during the development of the Military Cutoff
 Road Extension alternatives. The current interchange design provides the capacity needed to handle
 the high volume of traffic and minimizes impacts to Prospect Cemetery.

Historic Resources

Avoidance and minimization measures have been incorporated into the Alternative M1 design on Market Street at Mount Ararat AME Church. A southbound free flow ramp onto Military Cutoff Road Extension was changed from a full exit lane to an angular exit. In addition, the storage length for the right turn lane from Market Street onto Ogden Park Drive was reduced to match existing conditions. Right of way impacts to the proposed Mount Ararat AME Church historical boundary were reduced from 0.58 acre to 0.05 acre.

Other

Wetland BWD is located at the proposed intersection of Military Cutoff Road Extension Interchange

- Loop D and Gordon Road. The FEIS will include an explanation as to why the design cannot avoid impacts to wetland BWD.
- NCDOT will investigate on-site mitigation opportunities near wetland BWD. The currently
 undeveloped five-acre lots near the US 17 Wilmington Bypass will also be evaluated for use as
 potential mitigation sites.
- The design incorporates a retaining wall and guardrail to minimize impacts to stormwater ponds in the Food Lion shopping center, located on the west side of existing Military Cutoff Road just south of Market Street.
- The use of retaining walls will be evaluated at stormwater ponds BPE and BPF, which are located on the east side of Military Cutoff Road Extension between Lendire Road and Torchwood Boulevard.
- NCDOT will review the existing permit conditions for all stormwater ponds impacted by Military Cutoff Road Extension to ensure the permitted treatment requirements are met under post construction conditions.
- The FEIS will include an explanation as to why Military Cutoff Road Extension transitions from a 30-foot median to a 46-foot median within the wetland area north of Torchwood Boulevard. The FEIS will provide an estimate of the additional impacts associated with the use of the 46-foot median.
- NCDOT will further investigate ways to avoid impacts to the Corbett Tract and the Plantation Road Mitigation sites during detailed project design. If possible, no right of way will be acquired from these sites.

Name	Agency	Date
BRAD SHAVER Bud Effect	USACE	7/19/2012
	USEPA	
Hary Jordan	USFWS	7/19/2012
	NMF	
torue	NCDCM	7/19/12
Rence Gledkill-Earley	NCSHPO	7-10-12
	NCDMF	
Dailuping	NCDWQ	7/19/12
Styl gr	NCWRC	7-19-2012
Kin J. Billeggie	NCDOT	7/10/12
	WMPO	

- Loop D and Gordon Road. The FEIS will include an explanation as to why the design cannot avoid impacts to wetland BWD.
- NCDOT will investigate on-site mitigation opportunities near wetland BWD. The currently
 undeveloped five-acre lots near the US 17 Wilmington Bypass will also be evaluated for use as
 potential mitigation sites.
- The design incorporates a retaining wall and guardrail to minimize impacts to stormwater ponds in the Food Lion shopping center, located on the west side of existing Military Cutoff Road just south of Market Street.
- The use of retaining walls will be evaluated at stormwater ponds BPE and BPF, which are located on the east side of Military Cutoff Road Extension between Lendire Road and Torchwood Boulevard.
- NCDOT will review the existing permit conditions for all stormwater ponds impacted by Military
 Cutoff Road Extension to ensure the permitted treatment requirements are met under post
 construction conditions.
- The FEIS will include an explanation as to why Military Cutoff Road Extension transitions from a 30-foot median to a 46-foot median within the wetland area north of Torchwood Boulevard. The FEIS will provide an estimate of the additional impacts associated with the use of the 46-foot median.
- NCDOT will further investigate ways to avoid impacts to the Corbett Tract and the Plantation Road Mitigation sites during detailed project design. If possible, no right of way will be acquired from these sites.

Name	Agency	Date
	USACE	
	USEPA	
	USFWS	
acts likely for Kun Sec	Eler NMF	8/3/12
`	NCDCM	-
	NCSHPO	
	NCDMF	
	NCDWQ	
	NCWRC	
	NCDOT	
	WMPO	

- Loop D and Gordon Road. The FEIS will include an explanation as to why the design cannot avoid impacts to wetland BWD.
- NCDOT will investigate on-site mitigation opportunities near wetland BWD. The currently
 undeveloped five-acre lots near the US 17 Wilmington Bypass will also be evaluated for use as
 potential mitigation sites.
- The design incorporates a retaining wall and guardrail to minimize impacts to stormwater ponds in the Food Lion shopping center, located on the west side of existing Military Cutoff Road just south of Market Street.
- The use of retaining walls will be evaluated at stormwater ponds BPE and BPF, which are located on the east side of Military Cutoff Road Extension between Lendire Road and Torchwood Boulevard.
- NCDOT will review the existing permit conditions for all stormwater ponds impacted by Military Cutoff Road Extension to ensure the permitted treatment requirements are met under post construction conditions.
- The FEIS will include an explanation as to why Military Cutoff Road Extension transitions from a 30-foot median to a 46-foot median within the wetland area north of Torchwood Boulevard. The FEIS will provide an estimate of the additional impacts associated with the use of the 46-foot median.
 - NCDOT will further investigate ways to avoid impacts to the Corbett Tract and the Plantation Road Mitigation sites during detailed project design. If possible, no right of way will be acquired from these sites.

Name	Agency	Date
	USACE	
DE DZ	USEPA	8/6/12
	USFWS	
	NMF	
	NCDCM	
	NCSHPO	
	NCDMF	
	NCDWQ	
	NCWRC	
	NCDOT	
	WMPO	

- Loop D and Gordon Road. The FEIS will include an explanation as to why the design cannot avoid impacts to wetland BWD.
- NCDOT will investigate on-site mitigation opportunities near wetland BWD. The currently
 undeveloped five-acre lots near the US 17 Wilmington Bypass will also be evaluated for use as
 potential mitigation sites.
- The design incorporates a retaining wall and guardrail to minimize impacts to stormwater ponds in the Food Lion shopping center, located on the west side of existing Military Cutoff Road just south of Market Street.
- The use of retaining walls will be evaluated at stormwater ponds BPE and BPF, which are located on the east side of Military Cutoff Road Extension between Lendire Road and Torchwood Boulevard.
- NCDOT will review the existing permit conditions for all stormwater ponds impacted by Military Cutoff Road Extension to ensure the permitted treatment requirements are met under post construction conditions.
- The FEIS will include an explanation as to why Military Cutoff Road Extension transitions from a 30-foot median to a 46-foot median within the wetland area north of Torchwood Boulevard. The FEIS will provide an estimate of the additional impacts associated with the use of the 46-foot median.
- NCDOT will further investigate ways to avoid impacts to the Corbett Tract and the Plantation Road Mitigation sites during detailed project design. If possible, no right of way will be acquired from these sites.

Name	Agency	Date
	USACE	
	USEPA	
	USFWS	
	NMF	·
	NCDCM	
	NCSHPO	
	NCDMF	
	NCDWQ	
	NCWRC	
	NCDOT	
met	WMPO 9/2	25/12

Section 404/NEPA Interagency Agreement Concurrence Point No. 4a Avoidance and Minimization

Project Title and Project Numbers:

Proposed US 17 Hampstead Bypass, New Hanover and Pender Counties, TIP No. R-3300, State Project No. 40191.1.2, Corps Action ID 2007 1386

LEDPA/Recommended Alternative:

US 17 Hampstead Bypass Alternative E-H

Avoidance and Minimization:

US 17 Hampstead Bypass Alternative E-H minimizes impacts to resources. However, it is not feasible for the proposed project to completely avoid impacts to the Waters of the US and still meet the purpose and need of the project. The following avoidance and minimization efforts have been incorporated into the proposed project:

Section 404 Avoidance and Minimization Measures

- 3:1 slopes are proposed in wetland areas and adjacent to streams.
- US 17 Hampstead Bypass was realigned between Station 443+00 and Station 529+00 as it approaches and crosses Harrison Creek Road. Wetland impacts were reduced by 4.77 acres. Impacts to streams were reduced by 5.93 linear feet.
- US 17 Hampstead Bypass was realigned in the vicinity of the NC 210 interchange between Station 553+00 and Station 601+00. Wetland impacts were reduced by 0.78 acre and stream impacts were reduced by 258 linear feet.
- US 17 Hampstead Bypass was realigned in the vicinity of Holiday Drive between Station 650+00 and Station 714+00. Wetland impacts were reduced by 7.99 acres. However, the shift results in additional impacts to streams of 332 linear feet.

Additional Avoidance and Minimization

Red-cockaded Woodpecker

Prior to Concurrence Point 3, the proposed northern US 17 Hampstead Bypass interchange was moved from its location north of the Topsail School Complex to south of the schools to minimize impacts to red-cockaded woodpecker (RCW) foraging habitat. At the corridor public hearing, the public was opposed to the interchange location south of the schools because it limited thru-traffic on existing US 17 north of the schools. In response, a new local interchange is proposed north of the Topsail Schools Complex (Option 6TR). This additional interchange uses a reduced design to avoid affecting RCW foraging habitat. If RCW foraging habitat ceases to exist at the northern interchange at the time NCDOT applies for authorization from the Corps of Engineers to construct the project, the Department will revisit the original interchange design, known as Alternative E-H ORIG. As currently described,

Alternative E-H ORIG would further minimize wetland impacts compared to Alternative 6TR, which is NCDOT's preferred.

Water Quality and Erosion Control

Old Topsail Creek and Nixons Creek are designated as Commercial Shellfishing, High Quality Waters (SA; HQW) by the North Carolina Division of Water Quality. Tributaries of these streams (NSA, NSF, NDITCH1 and ZTRIB1) are designated SA; HQW due to the classification of their receiving waters. Design Standards in Sensitive Watersheds will be implemented for NSA, NSF, NDITCH1 and ZTRIB1 during project construction.

Community Impacts and Relocations

- In response to public input and concerns over lack of access, an interchange has been added north of the Topsail Schools Complex to maintain access along existing US 17 (Option 6TR). This interchange will provide the access requested by the public. It uses reduced design criteria to minimize impacts to RCW habitat and the Topsail Schools Complex, and avoid a Pender County water tower. If RCW foraging habitat ceases to exist at the northern interchange at the time NCDOT applies for authorization from the Corps of Engineers to construct the project, the Department will revisit the original interchange design, known as Alternative E-H ORIG. As currently described, Alternative E-H ORIG would further minimize wetland impacts compared to Alternative 6TR, which is NCDOT's preferred.
- Control of access was reduced along the west side of existing US 17 near the project's northern terminus to minimize impacts to a business and a church. It is expected that design modifications will result in three fewer residential relocations, four fewer business relocations and one less nonprofit relocation overall.

Name		Agency	Date
Brad Shaver		USACE	06/10/2013
ABSTA W	No.	USEPA	5 15 13
	Docusigned by: Sary Jordan	USFWS	06/11/2013
Fritz Rohde	—501BAD677C42452	NMF	06/11/2013
7D10D31C923E4AC	—Docusigned by: Steve Sollod	NCDCM	06/13/2013
Pence Gledhill-8	D233D46D7248414 Earley	NCSHPO	06/11/2013
AC28D78C939246E	DocuSigned by: Anne Destan	NCDMF	06/10/2013
—Docusigned by: Mason Herndon	A4DFC086EECE412	NCDWQ	06/10/2013
E795F318CA9F438	—Docusigned by: Travis W. Witson	NCWRC	06/11/2013
—Docusigned by: Kim Hillespie	31585D0B682E436	NCDOT	06/07/2013
E9AA3A8FE2574FE		WMPO	6/13/13
Project is within Wi	lmington MPO area, (Cape Fear RPO does Cape Fear RPO	not need to sign.

NEPA/Section 404 Merger Process Abstention Brief

May 15, 2013

To: Jay McInnis, P.E., NCDOT Project Manager

THRU: Heinz J. Mueller, Chief, NEPA Program Office

Cc: Merger Project Team

From: Christopher A. Militscher, REM, CHMM, USEPA Merger Representative

- 1. Project Name and brief description: US 17 Hampstead Bypass, R-3300 (and Military Cutoff Road Extension, U-4751), New Hanover and Pender Counties. Abstention from CP 4A, Avoidance and Minimization
- 2. Last Concurrence Points (*signed*): CP 4A for U-4751 on 8/8/12 and CP 3 for R-3300 on 5/17/12.
- 3. Explain what is being proposed and your position including what you object to. It is the EPA Merger Team representative's position that the NCDOT substantially revised the LEDPA following the CP 3 meeting (including the addition of a second interchange near the northern terminus and a 6-lane section) and since the issuance of the 9/11 DEIS. EPA does not believe that a substantial increase in impacts to jurisdictional wetlands and streams is justified without a full environmental analysis of all of the feasible alternatives previously considered during the CP 3 meeting for R-3300. As stated in NCDOT's e-mail of 4/29/13 and in the handout provided, the new LEDPA Alternative for R-3300 results in 4.35 acres and 750 linear feet of additional impacts to jurisdictional wetlands and streams, respectively. EPA notes that NCDOT reduced the increase in jurisdictional impacts by designing one interchange to be a smaller interchange than is typically desired.
- 4. Explain the reasons for your potential non-concurrence. Please include any data or information that would substantiate and support your position. The DEIS did not identify a second interchange for the northern terminus area. EPA also notes that the USACE has requested a commitment that NCDOT re-examine the very original northern interchange referred to as EH-ORIG based upon future ESA consultation for RCW foraging habitat.

A second interchange was not included in the original E-H corridor presented in the DEIS and it is anticipated that NCDOT will require additional right-of-way for this interchange not depicted in the DEIS. NCDOT and USACE now seek concurrence on avoidance and minimization for R-3300 without updating the DEIS or formally going

back to an appropriate concurrence point (Please see Merger MOU page 2, Concept of Concurrence).

NCDOT has provided an analysis that now combines U-4751 with R-3300 for the purposes of documenting avoidance and minimization measures. The Merger team's acceptance of the 'savings' of 2.9 acres of wetlands and 677 linear feet of streams under CP 4A is now added to the additional impacts from the changed design resulting in a 'smaller loss'. Currently, the U-4751 and R-3300 LEDPAs combined result in a net increase of 1.45 acres of wetlands and 73 linear feet of streams. EPA does not dispute potential traffic conflicts with an interchange near Topsail High School. However, EPA believes that the 'need' for a 6-lane facility should have been addressed in the DEIS. The analysis provided did not address the wetland and stream impacts for Alternative U, only the residential and business relocations, impacted noise receptors, and cultural resource effects. Alternative U was not selected as the LEDPA and it should have been comprehensively compared to the revised E-H Alternative. Alternative U also potentially avoided impacts to RCW.

EPA does recognize that the new LEDPA for R-3300 avoids and minimizes impacts to 3 fewer residences, 4 fewer businesses and 1 less church than the original LEDPA that the Merger team concurred on for R-3300.

In total with U-4751, this proposed project results in 248.2 acres of wetland impacts, and 22,379 linear feet (4.2 miles) of stream impacts.

- 5. List any relevant laws or regulations that you believe would be violated or jeopardized if the proposed action were implemented and explain the basis for violation. Please attach a copy of the relevant portion of the law or regulation or provide an email address where the documents may be located. CWA Section 404(b)(1) guidelines. See comments above and additional LEDPA information below. EPA has previously provided technical comments on the DEIS. http://water.epa.gov/lawsregs/guidance/wetlands/mitigate.cfm "Avoidance. Section 230.10(a) allows permit issuance for only the least environmentally damaging practicable alternative. The thrust of this section on alternatives is avoidance of impacts. Section 230.10(a) requires that no discharge shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact to the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."
- 6. What alternative course of action do you recommend? The transportation project sponsors NCDOT and USACE should formally re-evaluate the CP 3 LEDPA decision of revised Alternative E-H for R-3300. This abstention brief should be considered by NCDOT, USACE, and NCDWQ as a formal request to revisit a concurrence point under the Merger MOU. The NCDOT and USACE might also consider supplementing the DEIS to address the new LEDPA. Deferring these substantial design changes and substantial environmental impacts for disclosure in the FEIS is not recommended by the EPA Merger Team representative. Another alternative evaluated in the DEIS may now be the LEDPA.

FYI: Additional Information on LEDPA DETERMINATION

40 C.F.R. section 230.10(a), the basis for the LEDPA determination, states that, except as provided in CWA section 404(b)(2), a permit will not be issued "if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem An aquatic ecosystem is an ecosystem located in a body of water. Communities of organisms that are dependent on each other and on their environment live in aquatic ecosystems. The two main types of aquatic ecosystems are marine ecosystems and freshwater ecosystems, so long as the alternative does not have other significant adverse environmental consequences. The LEDPA requirement is an attempt to avoid environmental impacts instead of mitigating for them. The Corps may only approve a project that is the LEDPA. The LEDPA involves two separate determinations; it must be both practicable and the least environmentally damaging. The LEDPA requirement's purpose is "avoiding significant impacts to the aquatic resources and not necessarily providing either the optimal project location or the highest and best property use."

SECTION 404/NEPA INTERAGENCY AGREEMENT

CONCURRENCE POINT NO. 4A AVOIDANCE AND MINIMIZATION

PROJECT TITLE AND PROJECT NUMBERS:

Proposed SR 1409 (Military Cutoff Road) Extension, New Hanover County, TIP No. U-4751, State Project No. 40191.1.2, Corps Action ID 2007 1386

LEDPA/RECOMMENDED ALTERNATIVE:

Military Cutoff Road Extension Alternative M1

AVOIDANCE AND MINIMIZATION:

Military Cutoff Road Extension Alternative M1 minimizes impacts to resources. However, it is not feasible for the proposed project to completely avoid impacts to the Waters of the US and still meet the purpose and need of the project. The following avoidance and minimization efforts have been incorporated into the proposed project:

SECTION 404 AVOIDANCE AND MINIMIZATION MEASURES

- 3:1 slopes are proposed in wetland areas and adjacent to streams.
- Loops and ramps in the Military Cutoff Road Extension interchange at Market Street were tightened, reducing wetland impacts by 0.89 acre [BWD -0.19 acre, ZWY -0.04 acre, PD-04 -0.66 acre].
 Impacts to BDITCH1 were reduced by 1,911 square feet.
- A retaining wall was added on the west side of the proposed roadway south of Putnam Drive to avoid impacts to wetland PD-01 (-0.07 acre).
- Military Cutoff Road Extension north of Torchwood Boulevard was realigned in the vicinity of the Cape Fear Public Utility Authority's Nano Water Treatment Plant. Wetland impacts were reduced by 0.78 acre [BWI] and stream impacts were reduced by 677 feet [BSO -560 feet and BSP -117 feet].
- The U-turn bulb adjacent to wetland CWA just north of the Cape Fear Public Utility Authority property will be shifted southward out of Wetland CWA, reducing wetland impacts by 0.10 acre.
- The design was revised at the Military Cutoff Road Extension interchange with the US 17 Wilmington Bypass. The ramp in Quadrant D was pulled in, reducing wetland impacts by 1.16 acres [CWF -1.10 acres, DWC -0.06 acre]. Impacts to the Plantation Road Site were reduced by 0.02 acre and impacts to the Corbett Tract Residual Strip were reduced by 0.07 acre.

ADDITIONAL AVOIDANCE AND MINIMIZATION

Wells

The original design of proposed Military Cutoff Road Extension Alternative M1 would have relocated two water supply wells operated by the Cape Fear Public Utility Authority (CFPUA). These wells are located on the east side of the proposed roadway north of Torchwood Boulevard on the Nano Water Treatment Plant property. The alternative was realigned in this area to avoid these wells and minimize impacts to the CFPUA groundwater water supply infrastructure.

- Prior to the completion of the final environmental document for the project, NCDOT will meet with the CFPUA, local fire departments and other appropriate agencies to discuss additional protection measures for the wellhead protection area. Measures requiring NCDOT participation will be identified in the project commitments.
- NCDOT will coordinate with the CFPUA on the potential inclusion of a sign on Military Cutoff Road Extension identifying the water supply area.
- Well locations and a 100-foot buffer around the wells will be depicted on final constructions plans for Military Cutoff Road Extension. The Special Provisions within the final design plans will include a requirement for the contractor's to educate their employees that project construction is occurring within a wellhead protection area.
- NCDOT will coordinate with CFPUA on utility impacts resulting from the proposed project.

Water Quality and Erosion Control

• Howe Creek is designated an Outstanding Resource Water (ORW) by the North Carolina Division of Water Resources (DWR). Tributaries of this stream (BDITCH1) are designated ORW due to the classification of their receiving waters. Design Standards in Sensitive Watersheds will be implemented for BDITCH1 during project construction.

Residential and Business Relocations

- Control of access was reduced along Market Street both north and south of the Military Cutoff Road Extension interchange to minimize impacts to properties on Market Street. Loops and ramps in the interchange were tightened. A new relocation report and right of way cost estimate will be prepared and included in the FEIS. It is expected that the design modifications will result in eight fewer residential relocations and 33 fewer business relocations.
- The southeast quadrant (Loop D) of the Military Cutoff Road Extension and Market Street interchange was realigned to the west to minimize impacts to Covil Crossing, a residential area.
- Multiple interchange configurations were reviewed during the development of the Military Cutoff
 Road Extension alternatives. The current interchange design provides the capacity needed to handle
 the high volume of traffic and minimizes impacts to Prospect Cemetery.

Historic Resources

 Avoidance and minimization measures have been incorporated into the Alternative M1 design on Market Street at Mount Ararat AME Church. A southbound free flow ramp onto Military Cutoff Road Extension was changed from a full exit lane to an angular exit.

Service Roads

The northern end of Service Road 4 (SR4) will be realigned to follow the alignment of the existing dirt road adjacent to Military Cutoff Road Extension and to intersect Plantation Road at a T-intersection. The revised alignment will reduce wetland impacts for SR4 from approximately 2.71 acres to 2.24 acres, reduce forest impacts from approximately 1.17 acres to 0.32 acre, and eliminate 225 linear feet of delineated stream impacts. Delineated surface water impacts for tributary waters determined to be jurisdictional based on the presence of an OHWM will increase from 9,455.40 square feet (0.22 acre) to 12,262.80 square feet (0.28 acre).

Other

Wetland BWD is located at the proposed intersection of Military Cutoff Road Extension Interchange

Loop D and Gordon Road. The FEIS will include an explanation as to why the design cannot avoid impacts to wetland BWD.

- NCDOT will investigate on-site mitigation opportunities near wetland BWD. The currently
 undeveloped five-acre lots near the US 17 Wilmington Bypass will also be evaluated for use as
 potential mitigation sites.
- The design incorporates a retaining wall and guardrail to minimize impacts to stormwater ponds in the Food Lion shopping center, located on the west side of existing Military Cutoff Road just south of Market Street.
- The use of retaining walls will be evaluated at stormwater ponds BPE and BPF, which are located on the east side of Military Cutoff Road Extension between Lendire Road and Torchwood Boulevard.
- NCDOT will review the existing permit conditions for all stormwater ponds impacted by Military Cutoff Road Extension to ensure the permitted treatment requirements are met under post construction conditions.
- The FEIS will include an explanation as to why Military Cutoff Road Extension transitions from a 30-foot median to a 46-foot median within the wetland area north of Torchwood Boulevard. The FEIS will provide an estimate of the additional impacts associated with the use of the 46-foot median.
- NCDOT will further investigate ways to avoid impacts to the Corbett Tract and the Plantation Road Mitigation sites during detailed project design. If possible, no right of way will be acquired from these sites.

The project team has concurred on the Avoidance and Minimization for the proposed project as listed above. This Concurrence Point 4A form supersedes the Concurrence Point 4A form for TIP No. U-4751 signed on September 25, 2012.

NAME	AGENCY	DATE
Brid Ethans	USACE	4.16-2014
Cynthia F. Vancer Wille	USEPA	4.16.2014
Harry Jordan DocuSigned by:	USFWS	4/16/2014
Fritz Rolide	NMF	4/23/2014
7D10D31C923E4AC	NCDCM	4/16/14
Rence Gledhill-Early	NCSHPO	4.14.14
ð	NCDMF	
Mason Hemelo	NCDWR	4-14-12
S. W.	NCWRC	4-14-2014
Kin S. Dillespie	NCDOT	4/14/14
me ic	WMPO	4/14/14

APPENDIX D

AGENCY COMMENTS ON THE DEIS AND SDEIS



United States Department of the Interior



OFFICE OF THE SECRETARY

Office of Environmental Policy and Compliance Richard B. Russell Federal Building 75 Spring Street, S.W. Atlanta, Georgia 30303

ER 11/881 9043.1

November 22, 2011

Mr. Brad Shaver U. S. Army Corps of Engineers Wilmington Regulatory Office 69 Darlington Avenue Wilmington, NC 28403-1343

Re: Comments and Recommendations for the Draft Environmental Impact Statement (DEIS), for Improvements to U.S. 17, Hampstead Bypass, New Hanover and Pender Counties,

NC

Dear Mr. Shaver:

The U.S. Department of Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) for the proposed SR 1409 (Military Cutoff Road) Extension and proposed US 17 Hampstead Bypass located in New Hanover and Pender Counties, North Carolina (TIP No. U-4751 and R-3300). These comments are provided in accordance with provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

For U-4751, the North Carolina Department of Transportation (NCDOT) proposes to extend Military Cutoff Road as a six-lane divided roadway on new location from its current terminus at US 17 (Market Street) in Wilmington north to an interchange with the US 17 Wilmington Bypass. For R-3300, NCDOT proposes to construct the US 17 Hampstead Bypass as a freeway on new location. The US 17 Hampstead Bypass may connect to the proposed Military Cutoff Road Extension at the existing US 17 Wilmington Bypass and extend to existing US 17 north of Hampstead. There are currently five remaining alternatives under consideration.

The Department has been actively involved for several years in early coordination on this project through the combined NEPA/404 Merger Process, and many of our previous comments and recommendations are reflected in the DEIS. The Department has helped narrow the range of reasonable alternatives and assisted in refining remaining alternatives.

The cover page of the DEIS incorrectly states that the Service is a Cooperating Agency. Although the Service has participated in early coordination through the Merger Process for years,

the Service was not formally requested to be a Cooperating Agency (as per 40 CFR Section 1501.6), nor has the Service participated in the preparation of the DEIS.

Page 2-29 states that a total right of way width of 250 to 350 feet is proposed for Hampstead Bypass Alternatives E-H, O and R, and that a total right of way width of 250 to 520 feet is proposed for Alternative U. This statement appears inconsistent with the "Green Sheet" project commitment "Roadway widening improvements associated with Hampstead Bypass along existing US 17 in this area [in the vicinity of Holly Shelter Game Land] will not exceed a width of 200 feet in order to maintain connectivity between red-cockaded woodpecker foraging habitat partitions." This commitment also appears on page 4-37. For red-cockaded woodpecker (RCW, *Picoides borealis*) habitat east of US 17 to be counted towards the total habitat acreage within foraging partitions EC and 17, it is imperative that the total cleared area not exceed 200 feet.

Page 3-49 incorrectly states that green sea turtles (*Chelonia mydas*) do not nest in North Carolina. Green sea turtles do sporadically nest in North Carolina in small numbers. Page 3-49 also states "Loggerheads occasionally nest on North Carolina beaches..." Actually, loggerhead sea turtles (*Caretta caretta*) consistently nest in North Carolina.

Table 4-7 on page 4-17 displays the impacts to certain preservation areas. Especially problematic are the impacts to the Plantation Road Site. This site contains several stems of the federally endangered rough-leaved loosestrife (*Lysimachia asperulaefolia*). Page 3-16 correctly states that the Plantation Road Site was, as per the conservation measures in the January 2002 NCDOT Biological Assessment (BA) and May 22, 2002 Service Biological Opinion (BO) for the I-40 Connector (R-2405A), to be maintained as a preservation area for rough-leaved loosestrife. Alternatives M2+O and M2+U would impact a large portion of the preservation site as well as a significant number of rough-leaved loosestrife stems. The Department opposes these two alternatives. Although the other alternatives would have much smaller impacts to this preservation area and may not directly impact rough-leaved loosestrife stems, the designs should be modified to further avoid or minimize impacts.

The Corbett Tract Mitigation Site, as per the aforementioned BA and BO, was, in addition to providing wetland mitigation, to also serve as a preservation site for rough-leaved loosestrife. At the time of the 2002 Section 7 consultation for the I-40 Connector, this site had over 100 stems of rough-leaved loosestrife. Although the M1 alternatives would only have small impacts to this site (0.08-0.58 acre), the Department strongly recommends refining the designs to further avoid or minimize these impacts.

Four of the five remaining alternatives would impact the Corbett Tract Residual Strip to some degree (0.27 - 3.55 acres). As per the conservation measures in the aforementioned BA and BO, this area was to be utilized "as a buffer between the I-40 Connector and adjacent rough-leaved loosestrife clusters." Although rough-leaved loosestrife is not known to occur within this area, impacts should be avoided or minimized in accordance with the intent of the conservation measures within the BA and BO.

Table 4-17 on page 4-35 lists federally protected species by county. Golden sedge (*Carex lutea*) is now listed in New Hanover County with a record status of probable/potential. American

chaffseed (*Schwalbea americana*) is incorrectly listed in New Hanover County. It is actually only listed in Pender County as a historic occurrence.

Page 4-37 states "It is anticipated that the USACE will request of the United States Fish and Wildlife Service (USFWS) that formal consultation for red-cockaded woodpecker be initiated...after the least environmentally friendly damaging practicable alternative for the proposed project has been identified." The Department believes it would be prudent to delay formal Section 7 consultation until at least after Concurrence Point 4A (CP4A) in the Merger Process when more refined design information is available. If consultation were to begin prior to CP4A, it is likely that the RCW foraging habitat removal locations and extent would need to be repeatedly revised, thus necessitating re-initiation of Section 7 consultation. Due to encroaching private development, the habitat for RCWs in the project area and the status of the RCW groups have changed significantly in the last few years and will likely continue to change. As such, the Service strongly recommends that the timing of formal Section 7 consultation be carefully planned so as to avoid multiple re-initiations. It is very possible that biological conclusions may change within the next few years.

Page 4-39 and Table 4-17 state that the biological conclusion for golden sedge (*Carex lutea*) is "May Affect, Likely to Adversely Affect". The Department believes that this remains to be determined. As stated in the DEIS, no specimens of golden sedge have been observed within the project area. Although habitat is present, and the closely associated Cooley's meadowrue (*Thalictrum cooleyi*) is present, the Department believes that more surveys are warranted. If additional and appropriately timed surveys do not reveal any specimens of golden sedge, the Department would concur with a "no effect" conclusion for this species.

Pages 4-38 through 4-41 address the effects to Cooley's meadowrue (*Thalictrum cooleyi*) and rough-leaved loosestrife (*Lysimachia asperulaefolia*). Given the disparate degree of effects to these species depending upon the alternative selected, graphics depicting the location of the known locations of these species in relation to the different alternatives would be helpful.

We would like to emphasize the serious and complex issues regarding the effects of this project to RCWs. As the DEIS points out, the RCWs located in the adjacent Holly Shelter Game Land are part of the Coastal North Carolina Primary Core Recovery Population within the Mid-Atlantic Coastal Plain Recovery Unit. The Department has diligently worked with NCDOT to refine the alternative designs to minimize the level of take on RCWs. We acknowledge the efforts put forth by NCDOT to reduce the level of take on this species. Based on current information, it appears that the project will still result in a take of at least one active RCW group. Given the fact that the Coastal North Carolina Primary Core Population is still far from achieving its minimum size required for delisting (350 potential breeding groups), the loss of even one potential breeding group is significant. Additional coordination is needed to resolve this issue.

We appreciate the opportunity to review this project. If you have any questions regarding our response, I can be reached on (404) 331-4524 or via email at joyce stanley@ios.doi.gov.

Sincerely,

Joyce Stanley, MPA

Regional Environmental Protection Assistant

for

Gregory Hogue Regional Environmental Officer

cc: Jerry Ziewitz – FWS
Gary Jordan - FWS
Brenda Johnson - USGS
David Vela – NPS
Tommy Broussard – BOEM
OEPC – WASH



United States Department of the Interior

RECEIVED

Division of Highways

OCT 0 7 2011

Preconstruction
Project Development and
Environmental Analysis Branch

FISH AND WILDLIFE SERVICE Raleigh Field Office Post Office Box 33726 Raleigh, North Carolina 27636-3726

October 5, 2011

Gregory J. Thorpe, Ph.D.
Project Development and Environmental Analysis
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

This letter is in response to your August 29, 2011 letter which requested comments from the U.S. Fish and Wildlife Service (Service) on the Draft Environmental Impact Statement (DEIS) for the proposed SR 1409 (Military Cutoff Road) Extension and proposed US 17 Hampstead Bypass, New Hanover and Pender Counties, North Carolina (TIP No. U-4751 and R-3300). These comments are provided in accordance with provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

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The Service appreciates the opportunity to review this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520, ext. 32.

Sincerely,

Harry Jordan for Pete Benjamin

Field Supervisor

Electronic copy: Chris Militscher, USEPA, Raleigh, NC Travis Wilson, NCWRC, Creedmoor, NC



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

November 15, 2011

Dr. Gregory J. Thorpe, Ph.D., Manager Project Development and Environmental Analysis Branch North Carolina Department of Transportation 1548 Mail Service Center Raleigh, North Carolina 27699-1548

SUBJECT: Federal Draft Environmental Impact Statement for the US 17, Hampstead Bypass and Military Cutoff Road Extension, New Hanover and Pender Counties, North Carolina; CEQ No.: 20110322; TIP Project Nos.: R-3300 and U-4751

Dear Dr. Thorpe:

The U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the subject document and is commenting in accordance with Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The U.S. Army Corps of Engineers (USACE) and the North Carolina Department of Transportation (NCDOT) are proposing to extend Military Cutoff Road on new location for several miles (approximately 3.5 miles) as a 6-lane, median divided facility and connect to a 12 to 15 mile new location, multi-lane, median divided, bypass facility of US 17 Highway in New Hanover and Pender Counties, North Carolina. Both multi-lane facilities are expected to tie in with I-140 Wilmington Bypass (Also known as US 17, John Jay Burney Jr. Freeway). I-140 currently connects to US 17 (Market Street) with an interchange at Futch Creek Road.

EPA has been participating in the proposed project under the NEPA/Section 404 Merger process since 2005 and before the NCDOT proposed to combine the two facilities into one proposed project. According to EPA's records, the Purpose and Need (Concurrence Point - CP 1) for the combined roadway facilities was concurred on September 21, 2006. On August 23, 2007, EPA concurred on the Detailed Study Alternatives to be carried forward (Concurrence Point 2). Another CP 2 meeting was held on April 20, 2010, that further narrowed down the Detailed Study Alternatives. EPA concurred on CP 2A, Bridging and Alignment Review on May 27, 2010. EPA's technical review comments on the DEIS are attached to this letter (See Attachment A).

It should be noted that EPA and the U.S. Fish and Wildlife Service are listed on the DEIS cover as Cooperating Agencies. Section 1501.6 of the Council on Environmental Quality (CEQ) regulations should be further explored by the USACE and NCDOT for specific requirements of Cooperating Agencies.

EPA has rated the DEIS alternatives E-H+M1, O+M2, R+M1, U+M1 and U+M2 as 'Environmental Objections' (EO-2). EPA has rated detailed study alternative (DSA) U as "Environmental Concerns (EC-2). Those DSAs rated as EO-2 are those alternatives where there is a potential for significant environmental impacts to water supply wells and high quality waters of the U.S. that cannot be addressed without significant project modification or the development of other feasible alternatives. The DEIS fails to address the requirements of the Safe Drinking Water Act and the Clean Water Act with respect to current and future water supplies and the Military Cutoff Road extension impacts (i.e., DSA M1 and M2). The DEIS fails to identify avoidance and minimization measures and compensatory mitigation under Section 404 of the Clean Water Act for significant impacts to high quality waters of the U.S.

The rating of '2' indicates that DEIS information and environmental analysis is not sufficient and that additional information is required. EPA has substantial environmental concerns with respect to wetland and stream impacts and appropriate avoidance and minimization measures and compensatory mitigation. In addition, EPA also has environmental concerns for potential impacts to wetland mitigation and preservation sites, prime farmland impacts, impacts to threatened and endangered species, wildlife habitat fragmentation, and human environment impacts. EPA recommends that all of the technical comments in the attachment be addressed prior to the issuance of a Final EIS (FEIS). Furthermore, all relevant environment impacts that have not been disclosed in this document should be addressed in additional documentation prior to the next Merger decision point.

EPA has rated DSA U as having environmental concerns (EC-2) because it has significant environmental impacts to human and natural resources that have not been fully or accurately addressed in the DEIS and additional information is required. EPA believes that strictly combined with other transportation alternatives such a Transportation System Management (TSM) and Travel Demand Management (TDM), DSA U can possibly help meet the purpose and need. However, additional avoidance and minimization measures would be needed for DSA U to prevent degradation to protected and jurisdictional resources. EPA is requesting a conceptual mitigation plan prior to the selection of the Least Environmentally Damaging Practicable Alternative (LEDPA). EPA will not be able to concur on the Least Environmentally Damaging Practicable Alternative (LEDPA) until the significant environmental issues identified in the attachment are satisfactorily resolved.

Mr. Christopher Militscher of my staff will continue to work with you as part of the NEPA/Section 404 Merger Team process. EPA will continue to work with your staff and other Merger Team agencies on modifications to the DSAs and developing

alternatives that can potentially meet the stated purpose and need for the project study area. Should you have any questions concerning these comments, please feel free to contact him at Militscher.chris@epa.gov or (919) 856-4206 or (404) 562-9512. Thank you.

Sincerely,

Heinz J. Mueller Chief, NEPA Program Office

Cc: S. McClendon, USACE

B. Shaver, USACE

P. Benjamin, USFWS

B. Wrenn, NCDWQ

D. Wainwright, NCDWQ

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ATTACHMENT A

Draft Environmental Impact Statement
US 17 Hampstead Bypass and Military Cutoff Road Extension
New Hanover and Pender Counties
TIP Project Nos.: R-3300 and U-4751
Detailed Technical Comments

Purpose and Need for the Proposed Project

The NEPA/Section 404 Merger Concurrence Point (CP) 1 Purpose and Need statement is included in Appendix B of the DEIS. The stated purpose and need that Merger team representatives agreed to is as follows: "The purpose of the project is to improve the traffic carrying capacity and safety of the US 17 and Market Street corridor in the project study area". The DEIS includes an elaboration on the purpose and need on Pages 1-3 and 1-4. The discussion concerning safety is not fully examined. EPA believes that the severity of accidents and potential fatalities within the project study area may increase with a new location highway speed freeway. While overall 'minor' traffic accidents may be expected to decrease along US 17/Market Street with a new multi-lane bypass facility, FHWA and National Safety Council studies have shown that new location, high speed freeways in rural areas can potentially increase the severity of accidents. NCDOT safety studies also indicate that the total crash rate for US 17 between US 17 Wilmington Bypass (I-140) and Sloop Point Loop Road is below the 2005-2007 statewide crash rate for rural U.S. routes. Most of the proposed Hampstead Bypass is located substantially north of where the traffic and accident problems are located along existing US 17/Market Street.

This section of the DEIS includes an additional need concerning transportation demand. U.S. Census Bureau population data for New Hanover County and Pender County is provided. The DEIS states that with the population increase there is a corresponding growth in tourism and supporting services that resulted in a mixed-purpose traffic on US 17. This section of the DEIS does not specifically identify the correlation between population growth and the growth in tourism and supporting services. The population growth trends presented in Table 1-4 by decade for the periods of 2010-2020 and 2020-2030 are not reflective of more recent socio-economic trends. The large number of annual visitors for tourism does not specifically translate into increased population growth for the project study area. Considering the extensive wetland systems present in the project study area and that most upland areas have already been developed for retirement and seasonal second homes, future trends in permanent population growth are believed to be over estimated to justify new location facilities.

Figure 2 of the DEIS includes the 2008 Levels of Service (LOS) along some of the major routes in the project study area, including I-140/Wilmington Bypass, US 17/Market Street and US 17 to Sloop Point Loop Road at the northern project terminus. This figure is confusing as it only provides LOS from A to C, and then breaks out LOS D, E and F. Twenty-four (24) intersections are also provided with a LOS. EPA notes

that a majority of existing Military Cutoff Road within the project study area shown is LOS A-C. Additionally, EPA estimates that based upon peak hour NCDOT traffic estimates, approximately 66,500 feet of 123,375 total feet of existing roadways operate at a satisfactory LOS of A-C. Major sections of the existing multi-lane US 17 highway in Pender County and I-140/Wilmington Bypass show no current traffic capacity issues. Eight (8) of the 24 intersections also operate at LOS A-C.

EPA also notes the issue of local traffic versus regional through traffic. From Figure 2, it can be seen that while the I-140/Wilmington Bypass operates at an acceptable LOS, US 17 from College Road to Futch Creek Road (approximately 7 miles) operates at LOS F. Apparently, I-140/Wilmington Bypass is not drawing sufficient through traffic from downtown Wilmington roadways. The interchange of I-140/Wilmington Bypass and US 17 north of Porters Neck Road is rated with a LOS A-C. Similarly, the traffic problems (LOS F) south of the proposed extension of Military Cutoff Road would not expect to be improved with a new location, 6-lane freeway connecting to I-140 with a new interchange. EPA is uncertain how the new location, US 17/Hampstead Bypass of approximately 12 to 15 miles will improve traffic carrying capacity south of the proposed connections and new interchange with I-140/Wilmington Bypass. Except for one small area south of Scotts Hill Loop Road and a similarly small area by Topsail High School, US 17 between the I-140 interchange to the northern terminus operates at LOS D or better.

Figure 5 includes the projected 2035 LOS 'No-build'. Nearly all multi-lane roadways and intersections operate at LOS F based upon projected growth. The DEIS does not include the 2035 LOS in the project study area with the proposed new facilities (Build Scenario). This information is necessary to determine if after the 16 to 18 miles of new facilities are constructed that there will be any observable improvements to the existing facilities in the future. The project need appears to be based solely upon past population growth numbers in the two counties from 1990 to 2000 and 2000 to 2010. Section 3, Table 3-1 of the DEIS provides Population Characteristics for North Carolina, New Hanover County, Pender County, Wilmington, and 'Demographic Area'. The DEIS defines the demographic area as the area in and around the study area. The DEIS does not separate seasonal peak traffic numbers from the Average Annual Daily Traffic (AADT). The DEIS does not provide a break down by year of population growth rates within the demographic area. EPA would not anticipate that population growth rates from 2008 to present are at the same substantial percentage levels as was seen earlier in the decade. These 2035 population projections do not appear to take into account the project setting and the availability of other necessary infrastructure.

Overall, the information contained in the DEIS does not adequately support the purpose and need for multi-lane (6 lanes for Military Cutoff Road Extension and 4 lanes for the Hampstead Bypass) new location roadways, including a 12 to 15 mile freeway and a 3.5 mile, 6-lane boulevard. Other transportation initiatives, such as widening existing roadways, providing interchanges and improved intersection movements, adding turn lanes, providing 'traffic calming' measures and other Transportation Systems Management and Travel Demand Management measures could meet current and possible

future traffic problems. Regional traffic plans do not fully address the existing traffic conditions of the I-140/Wilmington Bypass and why the northern terminus was selected at its current location if it was not expected to draw regional and seasonal traffic from more congested local routes. Based upon NCDOT studies, I-140/Wilmington Bypass and its interchanges operate successfully at LOS A-C.

Recent purpose and need guidance by the Federal Highway Administration (FHWA) indicates that safety issues on existing facilities cannot always be addressed by the construction of new location facilities. Safety improvements along existing US 17 could be accomplished through a multiple of enhancements, including the addition of auxiliary turn lanes, restricting driveway access, improved signal timing, reducing the posted speed limit, increased signage, etc. Considering the rural and suburban nature of a majority of the project study area, new location and multi-lane facilities combined with existing safety concerns along US 17 will potentially increase the number and severity of accidents.

Preliminary and Detailed Study Alternatives

The DEIS includes discussions in Section 2.2 regarding Transportation Systems Management (TSM) Alternative, Travel Demand Management (TDM) Alternative and Mass Transit Alternatives. These transportation alternatives were not given full consideration and were eliminated from detailed study because they did not meet the purpose and need for the proposed new location projects. These alternatives were given only cursory consideration as individual alternatives and were never considered in combination along with other select improvements to existing roadways and intersections. Under the Mass Transit Alternative, EPA notes that NCDOT has concluded that there is a potential lack of demand. EPA requests a copy of the public survey and other traffic studies that support this conclusion. The DEIS also cites 'a diversity of trip origins and destinations'. EPA requests a copy of the origin/destination (O/D) study that was prepared to support this position.

The DEIS discusses the N.C. Strategic Highway Corridor (SHC) vision plan adopted by the N.C. Board of Transportation in 2004 as part of the purpose and need for the project. The SHC was not included in the purpose and need that Merger team representatives concurred on in September of 2006. The extension of Military Cutoff Road is designated as a boulevard in the SHC plan. The Hampstead Bypass is depicted in the 2004 SHC vision plan as a new location freeway that follows the most westerly routes of some of the Detailed Study Alternatives (DSAs). Without fully examining other transportation alternatives or knowing the full extent of traffic problems on US 17/Market Street, it was determined in 2004 that new multi-lane routes would be the 'vision' for the corridor. The DEIS does not explain the correlation between the traffic problems on existing US 17/Market Street and the need for additional traffic carrying capacity, new multi-lane routes of travel that are at a substantial distance from the poor LOS areas and intersections, and areas with higher accident rates shown on Page 2-2. EPA does not believe that other 'non-new location' transportation alternatives either singly or in combination were given full consideration in the DEIS.

The DEIS includes a comparison of 23 preliminary corridor alternatives (Alternatives A through W and Z) for the Hampstead Bypass and 2 preliminary corridor alternatives (Alternatives M1 and M2) for the Military Cutoff Road Extension. Many of these preliminary study corridors were apparently identified by NCDOT to strictly avoid residential relocations within the proposed 300-foot corridor without any context sensitive regard to natural system impacts (e.g., Alternative W: 501.5 acres of wetland impacts and 63 residential relocations). The original list of preliminary study alternatives were narrowed down to 13 DSAs on August 23, 2007, at a Concurrence Point (CP) 2 Merger meeting. The list of 13 DSAs was further narrowed down on April 20, 2010, to 6 DSAs at a second CP 2 meeting. The current list of DSAs includes Alternatives E-H, O, R, U and M1 and M2. Alternatives E-H, O, R and U all share the same northern terminus by Sloop Point Loop Road and US 17. Alternatives M1 and M2 share a common southern terminus at the intersection of Military Cutoff Road and US 17. Combining the freeway alternatives and Military Cutoff Road extension alternatives represents 5 DSAs.

Alternatives E-H, O and R are located more than a mile to the west of the existing multi-lane US 17 facility for a majority of their length. Alternative E-H appears at its most westerly point to be located more than 3 miles from the existing US 17 corridor. Alternative U is considered to be a 'shallow' bypass and utilizes the existing corridor for approximately half of its length. Alternative U does not require a new location interchange along I-140/Wilmington Bypass. The DEIS design for DSA U indicates a 250 to 350 right of way required for this DSA. The DEIS does not provide a specific justification for this proposed width compared to the other alternatives under consideration. This right of way width is also contradictory to the environmental commitment included on page 1 of 2 of the "Green Sheets".

Alternatives M1 and M2 follow the same alignment for more than half of its length and then tie in two future I-140/Wilmington Bypass interchanges that are approximately one mile apart. The current DSAs combinations are included in the summary comparison in Table S-1. The 5 DSAs under consideration in the DEIS do not necessarily meet the requirements under 40 CFR Part 1502.14. Traffic carrying capacity and accident issues are located south of the I-140/Wilmington Bypass interchange along US 17. These issues were discussed during previous Merger team meetings and agencies were informed that the NCDOT would evaluate a full range of alternatives that would singly or in combination meet the purpose and need. The initially proposed project study area was expanded at the request of the USACE and other agency representatives to insure that a full suite of reasonable alternatives would be explored during the NEPA process.

Human Environment Impacts

Relocations

Residential and business relocations for the DSA E-H+M1, O+M2, R+M1, U+M1 and U+M2 are shown in Table S-1 and are as follows: 61/84, 60/84, 59/84, 93/106, and

95/106. The business relocations include non-profit 'displacements' (i.e., Relocations). There are no large business employers identified within the demographic area (Pages 3-2 and 3-3 of the DEIS).

EPA compared residential and business relocations for the DSAs to similar multilane facilities identified and analyzed under the 2010 Merger Performance Measures Environmental Quality Indicators (Baseline and 2009 data). For residential relocations. impacts per mile for the five DSAs were comparable in range to the Baseline and 2009 impact numbers (2.0 to 4.2 residential relocations per mile for Eastern new location projects, respectively). Business relocations are higher for all 5 DSAs compared to the Baseline and 2009 impact numbers. The DEIS included non-profit organizations in the business relocation totals. This is not a common NCDOT practice nor consistent with current NEPA/Section 404 Merger guidance. In addition, NCDOT also included a church, cemetery graves and a "0 employee" daycare in the Appendix C business relocations for U-4751 Alternatives M1 and M2. According to this report, 63 business relocations will result from either DSA M1 or M2. Appendix C appears to 'double count' certain business relocations. For DSA U, the report includes the relocation of 9 non-profit organizations, including 7 churches. Another 32 'displaced' businesses are identified for DSA U. Also included in the list of 32 business relocations for DSA U is a seasonal produce stand, a small business with 'name unknown', and a new business under construction (no name). This report identified a cell tower will be 'isolated' by this alternative as well as water tanks for the Belvedere Plantation subdivision. However, this relocation report does not identify at least two existing water supply wells operated by Cape Fear Public Utility Authority that will be impacted by both DSA M1 and M2 (Page 4-22 of the DEIS). EPA requests that a consistent and accurate analysis of residential and business relocations be provided to EPA and other Merger team agencies prior to the CP 3 LEDPA meeting and included in the FEIS.

Minority and Low-Income Populations: Environmental Justice

Table 4-1 identifies minority owned residential and business relocations, including the following: DSA EH+M1: 13 out of 61 residential and 11 out of 84 businesses; DSA O+M2: 11 out of 60 residential and 11 out of 84 businesses; DSA R+M1: 13 out of 59 residential and 11 out of 84 businesses; DSA U+M1: 36 out of 93 residential and 22 out of 106 businesses; DSA U+M2: 36 out of 95 residential and 22 out of 106 businesses. The Environmental Justice impacts based upon 2000 Census data are described on Pages 4-4 to 4-6 of the DEIS. The DEIS concludes that the proposed project is not expected to have disproportionately high and adverse human health and environmental effects on low income or minority populations.

Community Resources

Access to Prospect Cemetery is expected to be eliminated by either DSA M1 or M2. Page 4-2 of the DEIS states that access to Prospect Cemetery will be evaluated during final roadway design. EPA believes that this is a known impact resulting from the Military Cutoff Road Extension and access road options and associated impacts should

have been identified in the DEIS, including potential impacts to jurisdictional wetlands and streams. The DEIS identifies an impact under DSA M1 and M2 to a driving range (golf) under community facilities and services. This is a commercial business (#57 under Business Relocations) and not a public or non-profit community facility. The DEIS does identify that Holly Shelter Game Land is located in the project study area. However, unlike the driving range, it is a public and community facility as well as a gameland and preservation area. It is used extensively by the public. EPA requests that inaccuracies contained in the DEIS be addressed in the FEIS.

Mount Ararat AME Church, a historic property, is also expected to be impacted by DSA M1 or M2. In addition, the DEIS also indicates that grave sites in this cemetery could also be impacted but does not quantify the potential number of grave sites. In the Appendix C relocation report, it is provided that DSA U will reportedly impact 647+/-grave sites: Wesley Chapel United Methodist Church (395 +/- graves), McClammy and King Family Cemetery (17 +/- graves) and Pollock's Cemetery (235 +/- graves). The number of grave sites in the relocation report for DSA M1 and M2 under TIP project number U-4751 is not provided. Potential cemetery impacts for DSAs E-H, O and R are not identified in the report.

Ogden Park is described on Page 4-2 of the DEIS and discusses the park boundary that was designed to accommodate a future transportation corridor through the middle of the county park. In addition: "Pedestrian access to existing multi-use path facilities and Ogden Park would be improved if pedestrian facilities are constructed." There is no identification of any proposed pedestrian facilities between the two sections of the park.

Additional details concerning non-profit relocations are provided in Section 4.1.2 of the DEIS. DSA E-H, O and R will impact 3 churches, including St. John the Apostle Catholic Church, Angel Food Ministries, and Topsail Baptist Church.

Hampstead is an unincorporated community in Pender County and is an area characterized as a home to four golf courses that are centered in large residential developments. The northern area of the project study area is characterized as being rural with natural areas preserved for recreation and education. The N.C. Wildlife Resources Commission manages Holly Shelter Game Land and North Carolina State University manages its blueberry research station. There are numerous other public and private mitigation sites and preserved lands in the project study area. Notably, there are several NCDOT mitigation sites (associated with the I-140/US 17/Wilmington Bypass project), including but not limited to the Plantation Road Site, Corbett Strip Residual Site and the Corbett Tract Mitigation Site.

Farmland Impacts

Impacts to prime farmlands are described in Section 4.3 on the impacts to the physical environment. Farming and agricultural practices are a human activity and represent businesses. In addition to N.C. Executive Order 96 on the Conservation of Prime Agricultural and Forest Lands, the Lead Federal Agency (i.e., USACE) is required

to comply with the Farmland Protection Policy Act (FPPA) of 1981 for those NEPA actions impacting prime farmland as defined under 7 CFR Part 658. Please see http://www.nrcs.usda.gov for more information.

Prime farmland impacts are quantified for each DSA in Table 4-5. Impacts are very specifically quantified as follows: DSA E-H+M1: 67.48 acres; DSA O+M2: 58.10 acres; DSA R+M1: 58.12 acres; DSA U+M1: 49.88 acres and DSA U+M2: 49.88 acres. Section 4.3.3 does not reference the required AD-1006 forms. EPA is unable to locate the forms in the DEIS appendices. EPA requests how these very exact impact numbers were calculated and if the Natural Resource Conservation Service (NRCS) completed AD-1006 forms for the DSAs. The DEIS does not provide any further information concerning potential N.C. Voluntary Agricultural Districts (VADs) or what measures to minimize farming impacts might be appropriate (e.g., Equipment access across dissected fields). According to the N.C. Department of Agriculture and Consumer Services, Pender County in 2008 was working towards establishing VADs.

Sections 3.3.3 and 4.3.3 of the DEIS fails to provide the relative importance of farming and other forest products for the Pender County economy and its employment contribution. Prior to the issuance of a FEIS, EPA recommends that supplemental information and analysis be provided regarding prime farmland and other agricultural land impacts resulting from the proposed project.

Noise Receptor Impacts

Impacts to noise receptors are described in Section 4.3 on the impacts to the physical environment. Human environment impacts are described in Section 4.1. Noise impacts are based upon receptor criteria to the human environment. Total noise receptor impacts are shown in Table 4-4. However, design year 2035 traffic noise levels that are expected to approach or exceed the NAC are different than from the table. Table S-1 includes the actual noise receptor impacts for each DSA: DSA E-H+M1:257 receptors; DSA O+M2: 236 receptors; DSA R+M1: 248 receptors; DSA U+M1: 310 receptors and DSA U+M2: 304 receptors.

Based upon the NCDOT Traffic Noise Abatement Policy, potentially 9 noise wall barriers are expected to meet the NCDOT's current feasibility and reasonableness criteria as identified on Page 4-11. The decision on the construction of the cost-effective noise barriers to provided needed noise abatement is being deferred by NCDOT until final design, more 'in-depth' Traffic Noise Modeling (TNM) and additional public involvement.

Historic Properties and Archaeological Sites

DSA U has 4 historic property adverse effects, including Poplar Grove, Scott's Hill Rosenwald School and Wesleyan Chapel united Methodist Church and Mount Ararat AME Church. The Mount Ararat AME Church impact (adverse effect) is associated with DSA M1 or M2. Thus, all of the DSAs have at least one adverse effect on a historic

property. There is no identified avoidance alternative. The impacts to historic properties from DSA U are based upon using a 'freeway' design along portions of existing US 17 and including parallel service roads. Some of the impacts to historic properties may be avoided or minimized if other reasonable designs are pursued during final design. Archaeological surveys have not been conducted for the DSAs and they are not proposed to be conducted until after the selection of the preferred alternative.

Hazardous Materials

Section 3.3.5 on hazardous materials is not accurate and should be corrected in the FEIS. Hazardous materials are regulated by the U.S. Department of Transportation (USDOT) under 49 CFR Parts 100-185. This section of the DEIS does not conform to other NEPA documents prepared by the NCDOT and reviewed by the EPA. Hazardous materials are identified in the 'Impacts to the Physical Environment' section and not in the 'Human Environment Impact' section.

Hazardous wastes are regulated under the Resource Conservation Recovery Act (RCRA) of 1976, as amended. Hazardous substances are regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. The NEPA/Section 404 Merger Guidance provides additional details concerning these laws and requirements. Some of the identified 'geoenvironmental' sites described in this section may meet the cleanup requirements of more than one Federal statute. Only 5 of the 28 sites referenced in Section 3.3.5 are described in Section 4.3.5. These 5 sites are associated with DSA M1 and M2. There is no qualifying description of the phrase: "low geoenvironmental impacts". Details concerning the other 23 hazardous material sites is not provided in the DEIS. Supplemental information and analysis should be provided to EPA prior to the issuance of the FEIS. This future geotechnical investigation and evaluation should include the potential for existing hazardous material sites and underground storage tanks to contaminate shallow groundwater resources.

Natural Resources Impacts

Groundwater Impacts and Water Supply Wells

Sections 3.5.3 and 4.5.3 of the DEIS discuss impacts to the project area water supply. Groundwater aquifers are generally described in Section 3.5.3.1. The Cape Fear Public Utility Authority (CFPUA) is reported to have several existing and proposed well sites associated with the Nano Water Treatment Plant (NWTP). Section 4.5.3.1.1 identifies that DSA M1 and M2 cross two existing well sites operated by the CFPUA. Additionally, DSA M2 would also impact two additional existing CFPUA well sites (to total 4) and a proposed well site. DSA M2 is anticipated to impact a raw water line and concentrate discharge line that provides a connection to several anticipated well sites. The DEIS states that estimates provided by CFPUA include the loss of up to 6 million gallons per day (mgd) of anticipated future water supplies for the project study area. The DEIS lacks any specificity as to what the loss of the existing water supplies might be,

what the potential to feasibly relocate the wells might be, or what the costs might be should either DSA M1 or M2 be selected.

DSA U is also expected to impact 3 existing 'transient' non-community water supply wells in the vicinity of the proposed US 17 interchange at Sidbury Road and Scott Hill Loop Road. Transient non-community wells are described as being ones that serve 25 or more people at least 60 days out of the year at facilities such as restaurants and churches. The DEIS does not provide any additional information regarding these impacts, including current withdrawal rates, the availability of alternative drinking water supplies, the costs to owners to relocate wells, etc.

The DEIS does not address what the potential for contamination to existing well fields will be. The depth and distance of CFPUA well sites is not provided with respect to the alternatives under consideration. The potential threat from hazardous material accidents to other existing wellheads is not evaluated in the DEIS. Section 5.3.1.4 identifies 33 CFR 320.4(m) with respect to water supply impacts. EPA has provided the following specific USACE citation:

"Water is an essential resource, basic to human survival, economic growth, and the natural environment. Water conservation requires the efficient use of water resources in all actions which involve the significant use of water or that significantly affect the availability of water for alternative uses including opportunities to reduce demand and improve efficiency in order to minimize new supply requirements. Actions affecting water quantities are subject to Congressional policy as stated in section 101(g) of the Clean Water Act which provides that the authority of states to allocate water quantities shall not be superseded, abrogated, or otherwise impaired."

The full impacts to water supplies are not detailed in the DEIS. EPA believes that the construction of either DSA M1 or M2 will potentially violate this Clean Water Act requirement. NCDOT should also refer to the Safe Drinking Water Act for additional requirements. The DEIS fails to provide any potential avoidance or minimization measures or mitigation to address the loss of current and future water supplies in the project study area.

Jurisdictional Streams and Wetlands

Surface water impacts are included in Sections 3.5.3.2 and 4.5.3.2 of the DEIS. A total of 134 streams were identified in the project study area. Four (4) streams within one mile downstream of the project study area have been designated as High Quality Waters (HQW) and one stream within one mile downstream has been designated Outstanding Resource Waters (ORW). These five streams are Futch Creek, Old Topsail Creek, Pages Creek, an unnamed tributary to the Atlantic Intercoastal Waterway (AIWW), and Howe Creek, respectively. There are no Section 303(d) listed impaired waters in the project study area. The physical characteristics of all of the streams in the project study area are provided in Table 3-7.

Jurisdictional stream impacts for the DSAs are as follows: DSA E-H+M1: 24,531 linear feet or 4.6 miles; DSA O+M2: 13,842 linear feet or 2.6 miles; DSA R+M1: 24,571 linear feet or 4.6 miles; DSA U+M1: 15,450 linear feet or 2.9 miles and DSA U+M2: 8,786 linear feet or 1.7 miles. EPA compared stream impacts for the DSAs to similar multi-lane facilities identified and analyzed under the 2011 Merger Performance Measures Environmental Quality Indicators (Baseline and 2010 data). Stream impacts per mile for four of the DSAs were a magnitude or more above the 2004-2009 Baseline of 410 linear feet/mile and the 2010 Eastern new location value of 200 linear feet/mile. Except for DSA U+M2 of 523 linear feet/mile, the other 4 DSAs had impacts per mile as follows: 1,402 linear feet/mile (Greater than 3 times the Baseline); 834 linear feet/mile (Greater than 2 times the Baseline); 1,437 linear feet/mile (Greater than 3 times the Baseline); and 858 linear feet/mile (Greater than 2 times the Baseline). EPA does not believe that impacts to jurisdictional streams will be substantially reduced from these DEIS values following the selection of a LEDPA due to constructability issues within the project study area.

A total of 85 ponds and 286 jurisdictional wetland systems were identified in the project study area. The physical characteristics of these surface waters are detailed in Tables 3-8 and 3-9 of the DEIS. By EPA's estimate as many as 43 of the 85 ponds are classified as 'stormwater ponds'. NCDOT provided the DWQ Wetland rating for each of the 286 wetland systems. The DEIS did not provide wetlands ratings using the multiagency accepted North Carolina Wetlands Assessment Methodology (NCWAM).

Jurisdictional wetland impacts for the DSAs are as follows: DSA E-H+M1: 246.1 acres; DSA O+M2: 384.4 acres; DSA R+M1: 297.4 acres; DSA U+M1: 218.4 acres and DSA U+M2: 283.8 acres. Impact calculations were based on preliminary design slope stake limits plus an additional 25 feet. EPA does not anticipate that final impact numbers to jurisdictional wetlands will be reduced from these specific impact estimates. Conversely, recent highway projects in the Coastal Plain of N.C. have shown an increase in wetland impacts following the selection of the LEDPA due to constructability issues brought forward by NCDOT (e.g., R-3620: Poorly drained soils requiring that the road bed be raised by 4 to 6 feet above natural ground elevation). EPA compared wetland impacts for the DSAs to similar multi-lane facilities identified and analyzed under the 2011 Merger Performance Measures Environmental Quality Indicators (Baseline and 2010 data). Similar to the stream impact comparisons, wetland impacts per mile for each DSA greatly exceeded the Baseline and 2010 Eastern new location project values of 2.1 acres/mile and 1.5 acres/mile, respectively. EPA estimates the following: DSA E-H+M1: 14.1 acres/mile; DSA O+M2: 23.2 acres/mile; DSA R+M1: 17.4 acres/mile; DSA U+M1: 12.1 acres/mile and DSA U+M2: 16.9 acres/mile. These wetland impacts per mile range from 6 to 10 times the 2004-2009 Baseline for an Eastern new location project. EPA does not believe that impacts to jurisdictional wetlands will be substantially reduced from these DEIS values following the selection of a LEDPA due to possible constructability issues and potential NCDOT safety concerns regarding 3:1 side slopes and the use of guardrails along a future high speed facility.

Section 4.5.4.1 contains a discussion on avoidance and minimization of impacts to jurisdictional resources. Minimum hydraulic bridges are recommended at Site #6, UT to Island Creek (Wetlands ISA and ISB) and Site #15 and Island Creek and UT to Island Creek (Wetlands HBSF and HBSH). Dual 200-foot bridges are recommended at Site #16, UT to Island Creek (Wetland HBSD2). Seventeen (17) major hydraulic crossings were identified during the CP 2A field meeting. Thirteen (13) structures are various sized reinforced concrete box culverts (RCBC) and one existing RCBC is proposed to be extended. The DEIS does not identify any additional avoidance and minimization measures to reduce impacts to jurisdictional streams and wetlands, such as reduced median widths, increased side slopes, the use of single bridges and tapered medians, retaining walls, reduced paved shoulders, etc.

Compensatory mitigation for unavoidable impacts to jurisdictional resources is very generally discussed in Section 4.5.4.1.2 of the DEIS. NCDOT proposes to seek onsite mitigation opportunities and utilize the N.C. Ecosystem Enhancement Program (EEP) for off-site mitigation needs. Considering the magnitude and severity of the impacts to high quality streams and wetlands, EPA requests a conceptual mitigation plan prior to the selection of a LEDPA and the issuance of a FEIS. There are no details as to what mitigation opportunities are available on-site and what credits or mitigation assets are available through the EEP. Considering the location of the proposed project and the presence of high quality waters of the U.S., the conceptual mitigation plan should be sufficiently detailed and provide for full compensation for lost functions and values to high quality resources.

During the Merger process, EPA also learned that several NCDOT mitigation sites associated with the I-140/Wilmington Bypass might be impacted from the proposed project, including the "Plantation Road Site". From Figure 10C of the DEIS, it appears that the "34-acre Residual Site" might also be impacted from several of the DSAs. From Figure 10D, it appears that the "Corbett Strip Residual Site" is probably going to be impacted from several of the DSAs. Discussions in the DEIS regarding the potential impacts to these NCDOT mitigation sites is included in Section 3.3.8.3. Impacts to these sites are not specifically identified in the summary table S-1 but are addressed Table 4.3.8.3. Additional information including credit/debit ledgers, restrictive covenants and easements, and other property records is being requested by EPA prior to the selection of a LEDPA and the issuance of a FEIS. NCDOT should avoid impacting approved mitigation sites that were required for compensation for previous highway project impacts (i.e., I-140/US 17 Wilmington Bypass).

Terrestrial Forest Impacts

Terrestrial forest impacts include Table S-1 summary of impacts for the DSAs are as follows: DSA E-H+M1: 518 acres; DSA O+M2: 512 acres; DSA R+M1: 472 acres; DSA U+M1: 406 acres and DSA U+M2: 455 acres. These impact numbers do not match the terrestrial community impacts shown in Table 4-9. Eliminating the impact estimates to 'maintain and disturbed communities' still does not provide for an accurate estimate of terrestrial forest impacts. The FEIS should identify how the terrestrial forest impacts

were calculated for each DSA and what natural communities were included in the estimates. EPA notes the comment concerning Executive Order 13112 on Invasive species and NCDOT's Best Management Practices (BMPs). EPA acknowledges the NCDOT invasive plant species list in Section 3.5.2.1.2 of the DEIS. The FEIS should identify specific BMPs to be followed to minimize the spread of invasive plant species following construction and provide detailed environmental commitments on how these BMPs are to be implemented. It would be useful to the public and decision-makers if NCDOT could provide previous project examples where these invasive species BMPs have cost-effectively resulted in the long-term elimination or reduction in invasive plant species following roadway construction activities. There are numerous Significant Natural Heritage Areas that are present in the project study area and the proposed new location alternatives represent a significant long-term threat to these unique habitats resulting from the introduction of aggressive and persistent roadside invasive plant species.

Threatened and Endangered Species

Sections 3.5.4.3 and 4.5.4.3 address protected species, including Federally-listed species under the Endangered Species Act (ESA). Considering the potential impacts to NCWRC's managed Holly Shelter Game Land, the DEIS should have also identified any State listed species under their jurisdictional and within the project study area. Twelve (12) Federally-listed threatened or endangered species are shown on Table 3-10. According to a copy of the U.S. Fish and Wildlife Service (USFWS) letter dated October 5, 2011, there are numerous unresolved issues concerning threatened and endangered species, including Red-cockaded woodpecker (RCW) and issues associated with the endangered plants and NCDOT mitigation sites that will be impacted from DSAs E-H, O, and R. EPA's defers to the NCWRC and USFWS concerning specific requirements involving Section 7 of the ESA and other wildlife issues. Generally, EPA has significant environmentally concerns regarding wildlife habitat loss and fragmentation resulting from most of the DSAs, including E-H, O and R. Potential animal/vehicle collisions involving new location, multi-lane, high speed facilities in rural areas in close proximity to game lands and other preservation areas need to be analyzed and studied prior to the issuance of a FEIS.

Other Environmental Issues

EPA notes the other DEIS comments and issues concerning Air Quality including transportation conformity, Mobile Source Air Toxics (MSATs), FEMA floodplain impacts, socio-economic issues, land use plans, pedestrian and bike path issues, gameland and preservation area direct impacts and indirect and cumulative effects (ICE) resulting from the proposed project.

Regarding socio-economic issues, EPA acknowledges the following DEIS comment: "It is anticipated that the proposed project will enhance long-term access and connectivity opportunities in New Hanover and Pender County and will support local, regional and statewide commitments to transportation improvement and economic

viability". Enhanced long-term access and connectivity are not part of the purpose and need for the proposed project that EPA and other Merger Team agencies agreed with in 2006.

Impacts to Holly Shelter Game Land, Corbett Tract Mitigation Site, Corbett Tract Residual Strip, Plantation Road Site, 34-Acre Residual Site, 22-Acre Residual Site, and Blake Savannah are detailed for the different DSAs in Table 4-7. Impacts to Holly Shelter Game Land and the 22-Acre Residual Site should be removed from the table as all of the impacts are 'zero' to these two areas. The total impacts for the DSAs are as follows: DSA E-H+M1: 4.43 acres; DSA O+M2: 42.94 acres; DSA R+M1: 5.01 acres; DSA U+M1: 3.24 acres and DSA U+M2: 34.40 acres. Most of the impacts are associated with DSA M2 and are to the Plantation Road and 34-Acre Residual mitigation sites. These significant impacts should be included in Table S-1 and future impact tables.

EPA does not agree with the assumptions and conclusions in the indirect and cumulative effects section of the DEIS. The analysis cites travel time benefits without providing the specific travel time savings or other traffic analyses required to make such a claim. The analysis ignores a critical component: water supply within the project study area and the importance it may have on current and future development and land uses. Furthermore, the qualitative ranking in Tables 4-18 and 4-19 are not supported by actual data or facts. These ranking appear to be very subjective and based upon past trends and not upon more recent socio-economic factors. The relationship of the information contained in Table 4-20 compared to the proposed project is not made clear in Section 4.6. Considering the significant impact predicted for the project study area watersheds, EPA is requesting a review copy of the indirect and cumulative quantitative water quality impacts analysis that was requested by the NCDWQ and prior to the issuance of a FEIS.



North Carolina Department of Administration

Beverly Eaves Perdue, Governor

Moses Carey, Jr., Secretary

November 7, 2011

Ms. Olivia Farr N.C. Department of Transportation Transportation Building 1548 Mail Service Center Raleigh, NC

Dear Ms. Farr:

Re: SCH File # 12-E-4220-0061; DEIS; Military cutoff extension from US 17 (Market Street) to the proposed I-140 in New Hanover County & US 17 bypass of Hampstead in New Hanover & Pender counties.

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

William F H Creech

Attachments

cc: Region O

Mailing Address: 1301 Mail Service Center Raleigh, NC 27699-1301 Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail state.clearinghouse@doa.nc.gov

Location Address: 116 West Jones Street Raleigh, North Carolina



Steven W. Troxler Commissioner

North Carolina Department of Agriculture and Consumer Services

Agricultural Services

Vernon Cox Environmental Programs Specialist

Ms. Sheila Green State Clearinghouse N.C. Department of Administration 1301 Mail Service Center Raleigh, North Carolina 27699-1301

October 31, 2011

State #: 12-E-4220-0061

RE: Proposed extension from US 17 to the proposed I-140 in New Hanover County and US 17 bypass of Hampstead in New Hanover and Pender Counties.

Dear Ms. Green:

Thank you for the opportunity to comment on the proposed extension from US 17 to the proposed I-140 in New Hanover County and US 17 bypass of Hampstead in New Hanover and Pender Counties. The North Carolina Department of Agriculture and Consumer Services (NCDA&CS) is concerned about the conversion of North Carolina's farm and forest lands to other uses. Due to the importance of agricultural activities in the area, as well as the economy of the entire state, NCDA&CS strongly encourages the project planners to avoid conversion of agricultural land to other uses whenever possible. When avoidance is not possible, all reasonable efforts to minimize impacts to farming operations and agricultural land should be implemented.

Vernon Cox

Environmental Programs Specialist



NORTH CAROLINA STATE CLEARINGHOUSE DEPARTMENT OF ADMINISTRATION INTERGOVERNMENTAL REVIEW

LICTADIA PRECEDIATIALI NEE

COUNTY: NEW HANOVER

PENDER

FO2: HIGHWAYS AND ROADS

STATE NUMBER:

12-E-4220-0061

DATE RECEIVED:

09/07/2011

AGENCY RESPONSE: 10/25/2011

REVIEW CLOSED:

10/30/2011

MS RENEE GLEDHILL-EARLEY CLEARINGHOUSE COORDINATOR DEPT OF CULTURAL RESOURCES

STATE HISTORIC PRESERVATION OFFIC

MSC 4617 - ARCHIVES BUILDING

RALEIGH NC

Concur - Survey to be done -A NYH/13TS 9-19-11

REVIEW DISTRIBUTION

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DENR - COASTAL MGT

DENR LEGISLATIVE AFFAIRS

DEPT OF AGRICULTURE

DEPT OF CULTURAL RESOURCES

DEPT OF TRANSPORTATION

Die 9/29/11 5 Pyo a/20/a

Duz 9/03/11

PROJECT INFORMATION

APPLICANT: N.C. Department of Transportation

TYPE: National Environmental Policy Act

Draft Environmental Impact Statement

DESC: Military cutoff extension from US 17 (Market Street) to the proposed I-140 in New

Hanover County & US 17 bypass of Hampstead in New Hanover & Pender counties.

CROSS-REFERENCE NUMBER: 06-E-4220-0107

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT	OF THIS REVIEW THE FOLLOWING IS SUBMITTED:	X	NO COMMENT	COMMENTS ATTACHED
SIGNED BY:	Cenu Glidhill-Early	~	pine DATE:	9/26/11
				/ /





North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue Governor

Dee Freeman Secretary

MEMORANDUM

TO:

Zeke Creech

State Clearinghouse

FROM:

Melba McGee

Project Review Coordinator

RE:

12-0061 DEIS - Proposed SR 1409 Extension and US 17

Improvements in New Hanover and Pender Counties

DATE:

October 26, 2011

The Department of Environment and Natural Resources has reviewed the proposed project.

The department asks that the Department of Transportation continue to work directly with our commenting agencies during the NEPA Merger Process and take all practicable measures to minimize environmental impacts. This will help avoid delays at the permit phase.

Thank you for the opportunity to comment on this project.

Attachments





North Carolina Department of Environment and Natural Resources Division of Coastal Management

Beverly Eaves Perdue Governor Dee Freeman Secretary

MEMORANDUM

TO:

Melba McGee, Environmental Coordinator

NCDENR Office of Legislative & Intergovernmental Affairs

FROM:

Steve Sollod, DCM Transportation Project Coordinator

CC:

Doug Huggett, DCM Brad Shaver, USACE

Gregory J. Thorpe, NCDOT

DATE:

October 19, 2011

SUBJECT:

State Clearinghouse Review

Draft Environmental Impact Statement Comments

Proposed SR 1409 (Military Cutoff Road) Extension and Proposed US 17 Hampstead

Bypass, New Hanover and Pender Counties, TIP Projects U-4751 and R-3300

Project Review No. 12-0061

The North Carolina Division of Coastal Management (DCM) has reviewed the Draft Environmental Impact Statement of the above referenced project, which was submitted to the NC State Clearinghouse for intergovernmental review. Comments on this environmental document were also requested by the NC Department of Transportation (NCDOT) and the US Army Corps of Engineers (USACE). DCM is responding to the NCDOT and USACE by copy of this memorandum. We appreciate the opportunity to review this document and provide comments relative to the NC Coastal Management Program.

Upon review of the document we offer the following comments:

S.7 Action Required by Other State and Federal Agencies

DCM has concluded that the proposed project will not impact a Coastal Area Management Act (CAMA) Area of Environmental Concern (AEC) as defined by the rules of the NC Coastal Resources Commission. Therefore, the proposed project will not require a CAMA Permit. It is correctly stated that the project will require a Federal Consistency Determination. As a point of clarification, the applicant (NCDOT) is required to evaluate the proposed project and certify to DCM and USACE that the project is consistent with the NC Coastal Management Program. This Consistency Certification includes a review of the state's coastal program (including the applicable CAMA Land Use Plans) and contains an analysis describing how the proposed project would be consistent, to the maximum extent feasible, with the state's enforceable coastal policies as mandated by the requirements of Federal Consistency (15 CFR 930). No federal license or permit shall be issued by a federal agency until the requirements of Federal Consistency have been satisfied. DCM will issue a public notice and circulate

the Consistency Certification with its accompanying supporting documentation to state agencies with potential interest in the project. Upon an internal review of NCDOT's written analysis of how the project is consistent with the NC Coastal Management Program and the comments received, DCM will either concur with NCDOT's Consistency Determination or find that the project is not consistent. The Final EIS should include an analysis of the project under Federal Consistency (15 CFR 930).

4.5.3.1.1 Wells

Alternative M2 would impact an additional two existing Cape Fear Public Utility Authority well sites than alternative M1. M2 would also impact several anticipated future Cape Fear Public Utility Authority well sites. The future well sites were selected based upon aquifer access, anticipated yields, and areas which protect well heads from contamination. It is estimated that up to six million gallons per day of future New Hanover County water capacity could be lost if alternative M2 is selected. Perhaps Table 2-3, Comparison of Current Detailed Study Alternatives, should include the "Public Water Supply Wells" feature to reflect the difference in alternatives M1 and M2.

2.4.2.2.1 Hampstead Bypass Typical Sections

DCM is concerned with the large amount of wetland impacts of the project. The proposed alternatives E-H, O, and R, from the US 17 Wilmington Bypass to NC 210, are configured with six 12-foot lanes. Based upon NCDOT's traffic projections, six lanes are required to accommodate future traffic volume in this section. There is no indication whether these projections accounted for seasonal fluctuation due to beach traffic. Only four lanes are proposed for the section from NC 210 to the existing US 17, in order to minimize RCW habitat impacts. Both of these sections are proposed with a 46-foot median and 14-foot outside shoulders. The proposed design includes 14-foot inside shoulders for alternatives E-H, O, and R, from the US 17 Wilmington Bypass to NC 210. If six lanes cannot be reduced to four lanes to reduce wetland impacts, perhaps the medium and/or shoulder widths could be reduced. According to NCDOT's Roadway Design Manual, it appears that the use of a 22' width median with concrete barrier on new location or widening projects may be used for those freeway projects that have significant environmental constraints that prohibit or restrict the use of the 46' or wider median. NCDOT's Roadway Design Manual also appears to indicate that freeways may use 10-foot shoulders or 12-foot shoulders when truck DHV exceeds 500. Perhaps the shoulder widths could be reduced. The reduction in median and/or shoulder widths can go a long way to reduce wetland impacts.

4.6.2 Evaluation of Cumulative Effects

Reference is made that the use of Best Management Practices will minimize adverse effects in areas of environmental concern. Rather than the term "areas of environmental concern", the term "surface waters" or "water bodies", should be used as a more accurate term, as "areas of environmental concern" is terminology used by DCM as specially designated areas not occurring in this project's study area.



U-4751 and R-3300 Draft EIS Comments

5.1.2 Other Agency Coordination

A list of federal, state, and local agencies indicates with an asterisk (*) which agencies provided comments to the project scoping letter. DCM is not indicated as having provided scoping comments. It should be noted that DCM provided scoping comments in response to the request for comments from the NC State Clearinghouse for Intergovernmental Review. Those comments are attached to this document and should be included in the Final EIS.

We hope that you find these comments helpful. If you have any questions or concerns, please contact me at (919) 733-2293 x 230, or via e-mail at steve.sollod@ncdenr.gov. Thank you for your consideration of the North Carolina Coastal Management Program.





Beverly Eaves Perdue Governor Division of Water Quality Coleen H. Sullins Director

Dee Freeman Secretary

October 13, 2011

MEMORANDUM

To:

Melba McGee, Environmental Coordinator, Office of Legislative and Intergovernmental

Affairs

From:

David Wainwright, Division of Water Quality, Central Office

Subject:

Comments on the Draft Environmental Impact Statement related to proposed SR 1409 (Military Cutoff Road) extension and the proposed Hampstead Bypass (US 17), New Hanover and Pender Counties, State Project No. 4091.1.2, TIPs R-3300 and U-4751.

State Clearinghouse Project No. 12-0061.

This office has reviewed the referenced document dated July 2011. The NC Division of Water Quality (NCDWQ) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the project as presented will result in impacts to jurisdictional wetlands, streams, and other surface waters. NCDWQ offers the following comments based on review of the aforementioned document:

Project Specific Comments:

- This project is being planned as part of the 404/NEPA Merger Process. As a participating team member, NCDWQ will continue to work with the team.
- Review of the project reveals the presence of surface waters classified as SA: High Quality
 Waters of the State in the project study area. This is one of the highest classifications for water
 quality. Pursuant to 15A NCAC 2H .1006 and 15A NCAC 2B .0224, NCDOT will be required to
 obtain a State Stormwater Permit prior to construction except in North Carolina's twenty coastal
 counties.
- 3. Review of the project reveals the presence of surface waters classified as SA: Outstanding Resource Waters of the State in the project study area. The water quality classification of SA; ORW is one of the highest classifications in the State. The NCDWQ is extremely concerned with any impacts that may occur to streams with this classification. It is preferred that these resources be avoided if at all possible. If it is not possible to avoid these resources, the impacts should be minimized to the greatest extent possible. Given the potential for impacts to these resources during the project implementation, NCDWQ requests that NCDOT strictly adhere to North Carolina regulations entitled "Design Standards in Sensitive Watersheds" (15A NCAC 04B .0124) throughout design and construction of the project. Pursuant to 15A NCAC 2H .1006 and 15A NCAC 2B .0224.



- 4. It is stated that there are no waters in the project area that are listed on the 303(d) list. However, it is not stated from which 303(d) list this information was derived. This should be based on the most recent list, which would be from 2010. The 2010 303(d) list has all waters in the state listed as impaired based on a statewide fish consumption advisory due to elevated mercury levels. If the 2010 list was not used, there may be other listings that are not included in the document; this information should be verified.
- Section 3.1 (Human Environment) makes reference to a Qualitative Indirect and Cumulative
 Effects Assessment dated June 2009. The NCDWQ has not had a chance to review this
 information and requests a copy of the Assessment.
- 6. The NCDWQ encourages the NCDOT to investigate any potential for onsite mitigation to offset the impacts of the project.
- 7. The "Travel Demand Management" (TDM) section concludes by stating that "TDM improvements would not add new lanes or provide alternative routes or means of travel to existing roadways." The Purpose Statement for the project does not specifically state that adding new lanes, providing alternative routes, or adding means of travel within the project area are the purpose of the project. With respect to TDM, the focus would be reducing traffic, especially during weekday peak travel times. With a reduction in traffic, the safety should increase on Market Street and the reduction in traffic would also reduce the need to increase the carrying capacity of the street. However, TDM is based on enough employers allowing such flexibility in work schedule combined with enough employees partaking of the flexibility. It is doubtful that the combination of the two would reduce traffic enough such that a noticeable decrease in crashes and traffic would occur.

General Comments:

- Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.
- 9. Environmental impact statement alternatives should consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. These alternatives should include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQ's Stormwater Best Management Practices Manual, July 2007, such as grassed swales, buffer areas, preformed scour holes, retention basins, etc.
- 10. After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands and streams to the maximum extent practical. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506[h]), mitigation will be required for impacts greater than 1 acre of wetlands or impacts to more than 150 feet of any single jurisdictional stream. In the event that mitigation is required, the mitigation plan should be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as wetland mitigation.
- Future documentation, including the 401 Water Quality Certification Application, should continue to include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.
- 12. The NCDWQ is very concerned with sediment and erosion impacts that could result from this project. The NCDOT should a idress these concerns by describing the potential impacts that may occur to the equal c environments and any mitigating factors that would educe the impacts.

- 13. The NCDOT is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, and rip rap to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.
- 14. The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater should not be permitted to discharge directly into streams or surface waters.
- 15. Based on the information presented in the document, the magnitude of impacts to wetlands and streams may require an Individual Permit (IP) application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the NCDOT and written concurrence from NCDWQ. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.

NCDWQ appreciates the opportunity to provide comments on your project. Should you have any questions or require any additional information, please contact David Wainwright at (919) 807-6405.

cc: Brad Shaver, US Army Corps of Engineers, Wilmington Field Office Chris Militscher, Environmental Protection Agency (electronic copy only) Travis Wilson, NC Wildlife Resources Commission (electronic copy only) Steve Sollod, Division of Coastal Management Mason Herndon, NCDWQ Fayetteville Regional Office File Copy

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES PUBLIC WATER SUPPLY SECTION

Inter-Agency Project Review Response

Project Number 12-0061 County New Hanover, Pender

Proj	ect Name	US Army Corps of Engineers Wilmington District	Type of Project	Draft Environmental Impact Statement - Proposed SR 1409 (Military Cutoff Rd)
Com	ments prov	-		Extension and proposed US 17 Hampstead Bypass
B	Regional P	rogram Person Heidi Kan	ne Cot	
\boxtimes	Regional Su	pervisor for Public Water Supply	/ Section	SEP 1 4 2011
	Central Off	ice program person		4.4.501
Nan	ne <u>Debra</u>	Benoy-Wilmington RO	Date 09/09/20	010
Telep	phone numb	er: 910 796-721	5	
Prog	ram within [Division of Water Resources:		
\$\hat{x}	Public War	ter Supply		
	Other, Nar	ne of Program:		
Res	ponse (che	ck all applicable):		
	No objection	on to project as proposed		
	No comme	ent		
	Insufficien	t information to complete review		
	Comments	s attached		
Ø		nents below		
1.10. 1.1			o private acces	1 A
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dependin	ng on th	e actual location(s)	fthe read. Pa	blic writer supply
wells m	ust hav	e actual location(s) of e a 100 radius that a	re owned or cold	relied by the system to
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these si	tes, It	oplease keep that in also appears that me	whethe road a	nd noise barriers
J3+54,	night be	2 located directly ove	er an existing 16	"potable transmission
wain and	yora 12"	2 located divertly over raw noter-transmission Return	n min. You mig	ht want to get an exact

Public Water Supply Section Environmental Review Coordinator for the Division of Water Resources

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES PUBLIC WATER SUPPLY SECTION

Project Number 12-0061 County New Hanover, Pender

Draft Environmental Impact

Date

Inter-Agency Project Review Response

Project Name	US Army Corps of Engineers Wilmington District	Type of Project	Statement - Proposed SR 1409 (Military Cutoff Rd) Extension and proposed US 17 Hampstead Bypass
improvement Supply Sec	ant should be advised that planets must be approved by the Estion prior to the award of a constant of 15A NCAC 18C .0300et seq.).	Division of Water Res Intract or the initiation	of construction (as
with state a	t will be classified as a non-comm and federal drinking water monitor arould contact the Public Water Su	ing requirements. For	more information the
relocation Section, T	r lines will be relocated during must be submitted to the Division echnical Services Branch, 1634 M 34, (919) 733-2321.	n of Water Resources	, Public Water Supply
	nal and Central Office comments,	see the reverse side o	f this form.
Jim McRight	PW	SS	09/09/2011

Section/Branch

Review Coordinator



North Carolina Department of Environment and Natural Resources Office of Conservation, Planning, & Community Affairs

Beverly Eaves Perdue, Governor

Linda Pearsall, Director

Dee Freeman, Secretary

October 19, 2011

MEMORANDUM

TO:

Melba McGee, DENR Environmental Coordinator

FROM:

Harry LeGrand, Natural Heritage Program

SUBJECT:

Draft EIS - Proposed SR 1409 (Military Cutoff Road) Extension and Proposed US 17

Hampstead Bypass; New Hanover and Pender counties

REFERENCE: 12-0061

This project likely will cause considerable environmental impacts, to wetlands, wildlife habitat, rare species, and possible natural areas. Many of these impacts will likely be secondary, as a result of habitat fragmentation through placement of a limited access highway through undeveloped lands. It is unfortunate that our Program, and perhaps most others in the Department, has not been contacted for Scoping comments; no such letters appear to be included in the document.

Enclosed are two maps showing the significant natural resources in the project area. The northern half of the project — from about a mile northeast of Sidbury Road to the connection with US17 northeast of Hampstead — appears to avoid significant natural resources. The western of the two alignments (red on Figure S-1), appears to better avoid Blake Savanna (green polygon north of Sidbury Road) and Sidbury Road Savanna (black polygon south of Sidbury Road). This red alternative also better avoids the NC DOT mitigation areas (maroon-brown polygons along the Wilmington Bypass), passing just to the west of them. The continuation of the red route south of the Wilmington Bypass (blue line on Figure S-1) also does a better job of avoiding significant natural resources than does the more eastern purple route on the figure.

In summary, the most western of the combined routes appears to do the least impacts to significant natural heritage areas, rare species, and conservation areas. However, it is very important that the NC DOT continue to conduct Section 7 consultations with the US Fish and Wildlife Service regarding potential impacts to Federally listed species such as the Red-cockaded Woodpecker (*Picoides borealis*), roughleaf loosestrife (*Lysimachia asperulifolia*), and Cooley's meadowrue (*Thalictrum cooleyi*), as indicated in the DEIS.

Please do not hesitate to contact me at 919-715-8697 if you have questions or need further information.

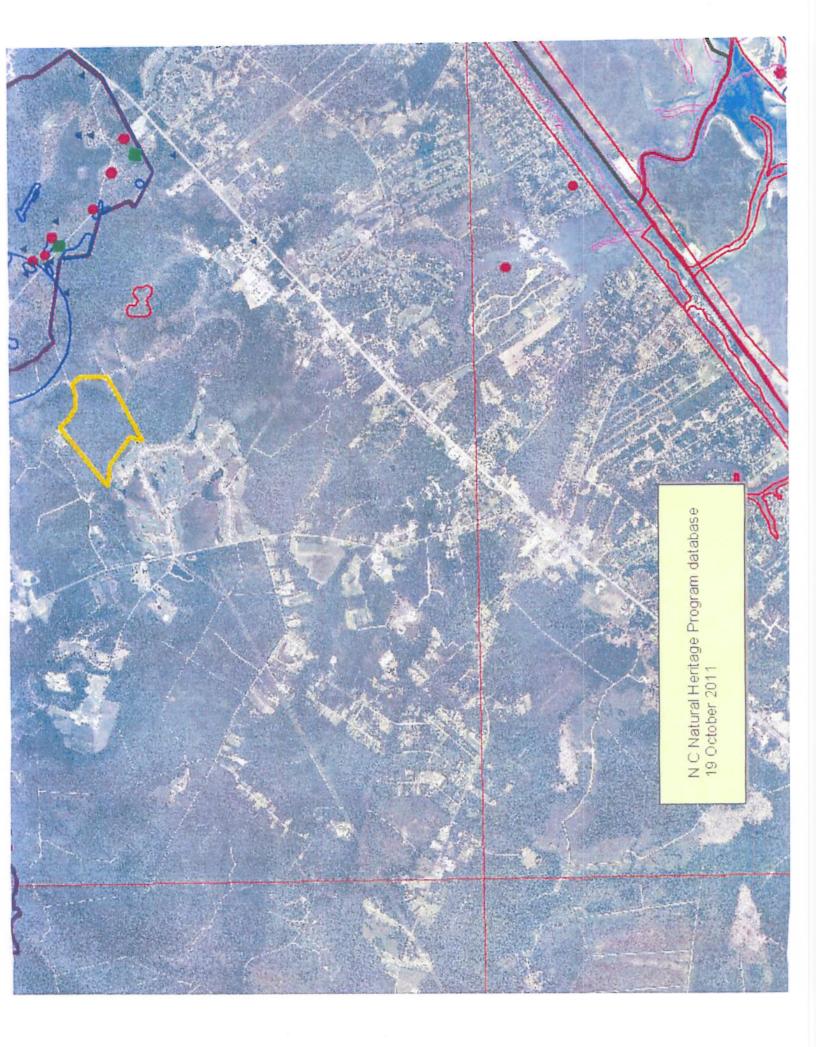
Enclosures

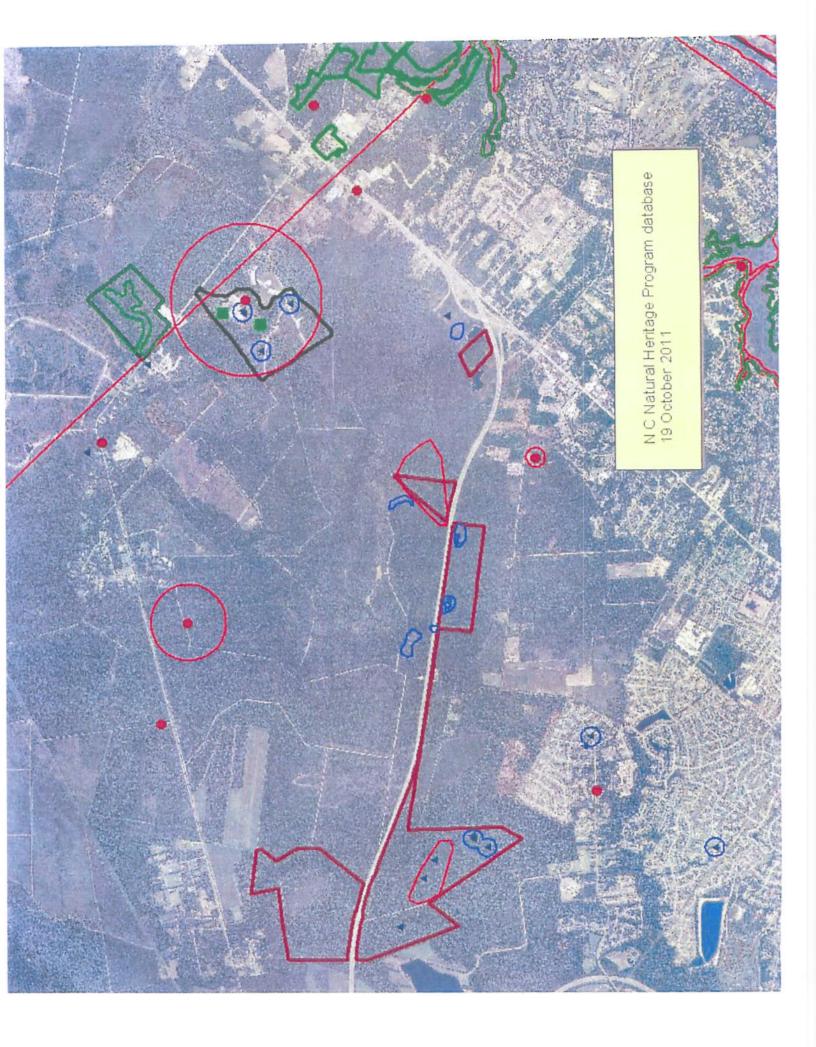
1601 Mail Service Center, Raleigh, North Carolina 27699-1601
Phone: 919-715-4195 \ FAX: 919-715-3060 Internet: www.oneNCNaturally.org

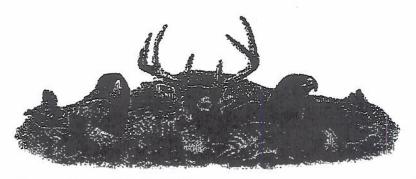
North Carolina

Naturally

Natural Resources Planning and Conservation







☐ North Carolina Wildlife Resources Commission ☐

Gordon Myers, Executive Director

MEMORANDUM

TO:

Melba McGee

Office of Legislative and Intergovernmental Affairs, DENR

FROM:

Travis Wilson, Highway Project Coordinator

Habitat Conservation Program

DATE:

October 19, 2011

SUBJECT:

North Carolina Department of Transportation (NCDOT) State Draft

Environmental Impact Statement (DEIS) for the proposed SR 1409 extension and the proposed improvements to US 17 in New Hanover and Pender Counties, North Carolina. TIP Nos. U-4751 and R-3300 SCH Project No. 12-0061

Staff biologists with the N. C. Wildlife Resources Commission have reviewed the subject DEIS and are familiar with habitat values in the project area. The purpose of this review was to assess project impacts to fish and wildlife resources. Our comments are provided in accordance with certain provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

Two projects have been combined and are included in the DEIS. For project U-4751 the NCDOT is proposing to extend Military Cutoff Road from Market Street to the US 17 Bypass, and R-3300 consist of improvements to US 17 from the exist US 17 Bypass north to include a bypass of Hampstead. The projects are being planned under the NEPA/Section 404 Merger 01 process. WRC is represented in this process and comments provided in conjunction with this process have been documented. However the impacts associated with the remaining alternatives are substantial and continued efforts to avoid and minimize impacts are necessary. Specific impacts of concern are:

 Impacts to the Corbett and Plantation Road mitigation sites, these sites and associate tracts provide compensatory mitigation as well as serve as conservation areas for sensitive plants species. Not only are direct impacts to these sites a concern, but also indirect impacts resulting from road and development proximity that may further limit the U-4751 and R-3300

Page 2

October 19, 2011

ability to manage these sites. Impacts to the areas should be avoided or further minimized.

- Direct impacts to Holly Shelter Game land have been avoided; however indirect impacts as a result of constructing these improvements in close proximity to Holly Shelter may restrict the ability for WRC to manage portions of this area with prescribed burning, this issue is not mentioned in the indirect and cumulative effects section of the document.
- Impacts to the Red-cockaded woodpecker (Picoides borealis) continue to be assessed; continued coordination should result in the further reduction of impacts to RCW habitat.
- Stream and wetland impacts with all remaining alternatives are significant; however we anticipate further avoidance and minimization of these resources.

This project will continue to go through the NEPA/Section 404Merger process, and additional agency coordination will occur through the remaining concurrence points. Thank you for the opportunity to comment. If we can be of further assistance please call mc at (919) 528-9886

Gary Jordan, USFWS CC: David Wainwright, DWQ Brad Shaver, USACE Chris Militscher, EPA



United States Department of the Interior

FISH AND WILDLIFE SERVICE Raleigh Field Office Post Office Box 33726 Raleigh, North Carolina 27636-3726

January 7, 2014

Richard W. Hancock, PE Project Development & Environmental Analysis N.C. Department of Transportation 1548 Mail Service Center Raleigh, North Carolina 27699-1548

Dear Mr. Hancock:

The U.S. Fish and Wildlife Service (Service) has reviewed the Supplemental Draft Environmental Impact Statement (SDEIS) for the proposed SR 1409 (Military Cutoff Road) Extension and proposed US 17 Hampstead Bypass, New Hanover and Pender Counties, North Carolina (TIP No. U-4751 and R-3300). Given the upcoming formal consultation under Section 7 of the Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531-1543), the Service offers the following comments regarding federally threatened and endangered species.

As you know, the Service has been actively involved for several years in early coordination on this project through the combined NEPA/404 Merger Process, and many of our previous comments and recommendations are reflected in the SDEIS. Since the July 2011 release of the Draft Environmental Impact Statement (DEIS), a preferred alternative has been selected and project design changes have occurred. These project design changes include an additional interchange and additional road lanes at the northern end of the project. This SDEIS describes and provides justification for those changes. In addition, the SDEIS provides information on potential service roads that was not included in the DEIS.

As stated in the SDEIS, the Service concurred with the selection of alternative M1+E-H as the Least Environmentally Damaging Practicable Alternative (LEDPA) selected on May 17, 2012. We supported M1+E-H as the LEDPA primarily because it has the least impacts to federally threatened and endangered species. Since the selection of the LEDPA, further refinements in the location and design of the northern interchange have occurred. With regard to the northern interchange, the Service supports the conclusions of the SDEIS. Specifically, we support the current reduced design of the northern interchange which minimizes adverse effects to the federally endangered red-cockaded woodpecker (RCW, *Picoides borealis*).

Despite substantial and successful efforts to minimize adverse effects to RCWs, it appears that the current project design would still likely require an unavoidable take of one active RCW group. This one RCW group is part of the Coastal North Carolina Primary Core Recovery Population within the Mid-Atlantic Coastal Plain Recovery Unit. Given the fact that the Coastal North Carolina Primary Core Population is still far from achieving its minimum size required for delisting (350 potential breeding groups), the loss of even one potential breeding group is

significant. We continue to emphasize the serious nature of addressing the loss of this one group in the upcoming additional coordination that is referred to in the SDEIS.

The Service acknowledges that, as a result of minimization of impacts to RCWs, additional impacts to wetlands will be incurred. Although the Service has a vested interest in conserving wetlands, we believe that it is justifiable to incur additional wetland impacts in order to reduce the level of take on RCWs down to just one group. In conjunction with NCDOT's proposed acquisition and restoration of habitat adjacent to Holly Shelter Game Land, the current project design would likely not preclude Holly Shelter Game Land from reaching its RCW recovery goals in the long term. However, selecting an alternative with fewer wetland impacts but with a higher level of take of RCWs may preclude Holly Shelter from reaching its recovery goals and would weigh heavily in the Service's jeopardy analysis in the upcoming formal Section 7 consultation. The Service would also object to the issuance of a Section 404 permit for an alternative with a take of more than one RCW group. We believe successful compensatory mitigation for wetland impacts is much easier to obtain than offsetting impacts to RCWs. Opportunities to offset impacts to RCWs are substantially fewer than opportunities to mitigate for wetlands. RCWs are a much more limited resource than are wetlands.

In Section 5.6.4.3 the SDEIS states that the project likely will adversely affect the federally endangered rough-leaved loosestrife (*Lysimachia aesperulaefolia*). While this may ultimately prove to be the case, the Service believes that refinements in final design could possibly avoid adverse effects to this species, thus avoiding formal Section 7 consultation for rough-leaved loosestrife. We will continue to provide input on this issue through the Merger Process.

The Service appreciates the opportunity to review this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520 (Ext. 32).

Sincerely,

Jay Jordan

Pete Benjamin

Field Supervisor

Electronic copy:

Jay McInnis, NCDOT, Raleigh, NC Kim Gillespie, NCDOT, Raleigh, NC Rachelle Beauregard, NCDOT, Raleigh, NC Travis Wilson, NCWRC, Creedmoor, NC Chris Militscher, USEPA, Atlanta, GA David Wainwright, NCDWR, Raleigh, NC Steve Sollod, NCDCM, Raleigh, NC

Mc/nnis/Gillespie



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

Date: December 16, 2013

Mr. Richard W. Hancock, P.E.

Manager, Project Development and Environmental
Analysis Branch

North Carolina Department of Transportation

1548 Mail Service Center

Raleigh, North Carolina 27699-1548

SUBJECT: EPA Review Comments of the Federal Supplemental Draft Environmental Impact Statement for the Proposed US 17, Hampstead Bypass and Military Cutoff road Extension, New Hanover and Pender Counties, TIP Nos.: R-3300 and U-4751; CEQ No.: 20130317; COE-E40842-NC

Dear Mr. Hancock:

The U.S. Environmental Protection Agency (EPA) has reviewed the subject document and is providing comments in accordance with Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The North Carolina Department of Transportation (NCDOT) and the U.S. Army Corps of Engineers (USACE) propose to construct a 17.8 mile multi-lane facility on new location with an additional interchange for the previously selected US 17 alternative and potentially 5.2 miles of recommended service roads.

EPA is a participating member of the NEPA/Section 404 Merger team for this proposed project. EPA provided review comments to the DEIS on November 15, 2011, and rated the document alternatives with Environmental Objections (EO-2), for Alternatives E-H+M1, O+M2, R+M1, U+M1, and U+M2. EPA rated Alternative U as Environmental Concerns (EC-2). On February 28, 2012, EPA provided supplemental DEIS report comments concerning the proposed impacts to public water supply groundwater wells associated with the proposed project. Following the Merger team Least Environmentally Damaging Preferred Alternative (LEDPA) /Concurrence Point 3 meeting held on May 15, 2013, for the US 17 portion of the project, the NCDOT and USACE proposed substantial modifications to E-H+M1. The NCDOT and USACE preferred alternative is now M1+E-H Option 6TR. EPA provided an NEPA/Section 404 Merger process abstention brief on May 15, 2013, outlining the continued environmental concerns regarding the E-H Alternative and the additional modifications being made to the project design. EPA's additional technical comments are attached in Attachment A to the letter (See Attachment A). EPA has also provided additional information concerning EPA's activities in the Merger team process in another attachment (See Attachment B).

In summary, EPA has continued environmental concerns (EC) for Alternative M1 for the Military Cutoff Road Extension portion of the project due to potential impacts to the wellhead

protection area for the Nano Water Treatment facility. EPA recognizes the measures taken to avoid direct impacts to several of the wellheads by shifting the alignment for M1. However, the proposed project commitments for future coordination with the Cape Fear Public Utility Authority with respect to potential future contamination issues to the wellhead protection area resulting from a hazardous material spill should be strengthened. For the preferred alternative, M1+E-H with Option 6TR, substantial impacts remain to: jurisdictional wetlands and streams including ORW and HQW, historic resources, noise receptors, prime farmlands, endangered species, terrestrial forests, residences and businesses, cemeteries, the Pender County Recycling Center, the Topsail High wastewater treatment plant, and hazardous material sites. Therefore, for Alternative E-H and for Alternative M1+E-H with option 6TR we continue have environmental objections. We request that the FEIS provide additional information on noise receptor impacts, prime farmland, endangered species, compensatory mitigation for wetlands and streams. The inclusion of 5.2 miles of service roads to the preferred alternative should also be made clear to the Merger team prior to the issuance of the FEIS. See Attachment A for further discussions of issues that should be addressed in the FEIS and ROD.

Please contact Mr. Christopher Militscher of my staff at <u>militscher.chris@epa.gov</u> or 404-562-9512 if you have any questions concerning these comments.

Sincerely,

Heinz J. Mueller, Chief NEPA Program Office

Office of Environmental Accountability

Attachments A and B

Cc: S. McClendon, USACE, w/attachments

B. Shaver, USACE, w/attachments

M. Herndon, NCDENR w/attachments

G. Jordan, USFWS w/attachments

Attachment A

Detailed Technical Comments

Supplemental Draft Environmental Impact Statement
US 17, Hampstead Bypass and Military Cutoff Road Extension, New Hanover and Pender
Counties, TIP Nos.: R-3300 and U-4751

Purpose of this Document

There are several statements in this section of Supplemental Draft Environmental Impact Statement (SDEIS) that should be clarified. On page 1-1, the SDEIS states: "The Merger Team's LEDPA decision involves the selection of a corridor, not a specific project design." The LEDPA decision is based upon the alternative's impacts from the proposed project design within the corridor plus 25 feet for construction slope stakes. The corridor (typically 500 to 1,000 feet for new location multi-lane highways) preliminary impacts are utilized in the Merger process for Concurrence Point (CP) 2, selection of the Detailed Study Alternatives (DSAs). During the CP 4A meeting, EPA's Merger Team representative clearly articulated this issue and that the NCDOT's and USACE's proposed changes to the LEDPA, including the addition of a new interchange and increasing from a 4-lane to a 6-lane facility, the need for additional right-of-way beyond what was shown at the LEDPA meeting, and the substantial increases to jurisdictional resources, required a re-assessment of the July 2011DEIS. The NCDOT's and USACE's proposed design changes following the corridor/design public hearing were presented to the Merger team after the LEDPA had been selected by the Merger team agencies (Please refer to the 2005 Merger Guidance Manual, Process I – Projects on New Location, pages 11-12).

The SDEIS also 'presents information' related to potential service road locations currently under study for Military Cutoff road Extension and US 17 Hampstead Bypass. There are additional jurisdictional impacts associated with these proposed service roads that were not disclosed or addressed during the May 2012 LEDPA concurrence meeting. Some of these service road impacts are substantial, including the 2 service roads NCDOT and the USACE currently propose as being 'cost-effective': SR 1 and SR 4. SR 4 results in an additional 2.71 acres of wetland impacts, 1,170 linear feet of stream impacts, and 1.17 acres of terrestrial forest impacts. There is no rationale provided as why these 2 service roads are cost-effective while the other 12 service roads are not cost-effective. Section 4.4 of the SDEIS explains that potential service road locations could not be identified ("In the case of this project, potential service road locations could not be identified and the service road studies conducted in time to discuss this information with the Merger team.") but does not provide the appropriate reason 'why' this impact information was not available at the CP 4A meeting.

This section of the document refers the reader to Section 4.5 and the 'Validity of Merger Team LEDPA Decision'. Table 5 in this section of the SDEIS provides a generalized table of impacts comparing the DEIS DSA. However, the second footnote of this table indicates that relocations ('displacements') were calculated to reflect changes associated with the northern interchange Option 6TR only. It also states that changes in impacts as a result of avoidance and minimization measures elsewhere along the project are not included in the table. There is no

rationale why this method of comparing impacts was performed in this manner. Moreover, as stated: "The table shows an increase or decrease in impacts to environmental features for the detailed study alternatives with Option 6TR incorporated into the design of each alternative". This assessment method of comparing the LEDPA to the other DSAs with the inclusion of the additional interchange and 6-lanes into each of the other DSAs is potentially pre-decisional. Alternative U had other interchanges (5 between Futch Creek Road and Jenkins Road) in its design that could alter the traffic projections for north of Topsail High School.

Section 4.5 also states that the changes now proposed for DSA M1+E-H with Option 6TR does not invalidate the Merger Team's concurrence on that alternative as LEDPA. This claim is not supported by the 2005 Merger Guidance Manual, Concept of Concurrence, on page 2, where a re-evaluation of concurrence might include a 'discovery of an impact, resource, or additional information that was not previously identified or did not previously exist'. Section 4.5 also states: "....that the final decision on LEDPA will not be made until after the USACE has applied the Section 404(b)(1) guidelines to a submitted permit application and completed the public interest review process for the proposed project." The statement on Page 4-5 concerning the final selection by the USACE of either M1+E-H with Option 6TR or the original M1+E-H as the future permitted LEDPA should be clarified in the FEIS.

Changes to the DEIS Impacts

Jurisdictional Wetlands and Streams

Table S-1 includes the comparison of DSA M1+E-H with Option 6TR or the original M1+E-H from the DEIS. This table includes the avoidance and minimization efforts applied to the LEDPA (original M1+E-H). It should be noted that from the Merger team LEDPA decision, the impacts after avoidance and minimization actually increased for wetlands (248.15 acres vs. 246.05) and decreased for streams (22,379 linear feet vs. 24,531 linear feet). It should also be noted from Table S-1 that residential and business relocations significantly were reduced by avoidance and minimization measures from the DEIS M1+E-H LEDPA to the M1+E-H with Option 6TR (Preferred) alternative from 61 and 84 vs. 53 and 39, respectively.

Table S-1 also includes the additional impacts from 5.2 miles of service roads S1 and S4 resulting in additional impacts to jurisdictional resources. Wetland impacts increased 16.89 acres and stream impacts 1,343 linear feet. There are no residential or business relocations associated with the proposed service roads.

For the total project as proposed, wetland impacts are now estimated at 265.04 acres for 17.82 miles of multi-lane highways and 5.2 miles of service roads. Stream impacts in total have increased from the LEDPA to 23,722 linear feet. Based upon Tier I Merger Performance Measure baseline data from 2004-2011, the current project's preferred alternative has 11.52 acres of wetland impacts per mile or more than 4 times (400%) the accumulated baseline impact of 2.7 acres/mile for a New Location Eastern project. Similarly, the 23,722 linear feet of stream impacts or approximately 1,000 linear feet/mile is more than 3 times (300%) the typical Eastern Merger stream impact per mile of approximately 300 linear feet/mile. The 11.52 acres/mile of wetlands impact and the 1,000 linear feet/mile of stream impact represent one of the highest

observed Eastern project jurisdictional impacts per mile for a roadway facility. The sufficiency of the effort to avoid and minimize these jurisdictional impacts needs to be further confirmed.

The proposed project impacts Outstanding Resource Waters (ORW) including tributaries to Howe Creek designated by NCDOT as BDITCH1. Old Topsail Creek and Nixon's Creek are designated Commercial Shellfishing/High Quality Waters (SA; HQW). Tributaries to these streams include those designated by NCDOT as NSA, NSF, NDITCH1 and ZTRIB1. The SDEIS does not quantify the impacts to ORW or SA/HQW or describe how impacts to these aquatic resources were avoided and minimized.

A conceptual compensatory mitigation plan for unavoidable impacts to jurisdictional waters is not provided in the SDEIS. Similar information from the DEIS is included on page 5-20 of the SDEIS (i.e., On-site mitigation opportunities being investigated by the NCDOT and the balance of impacts will be requested through the NC Ecosystem Enhancement Program – NCEEP). Considering the magnitude and intensity of the jurisdictional impacts (i.e., approximately 265 acres and 23,722 linear feet), the FEIS should provide a mitigation plan for the proposed project that is compliant with the 2008 final mitigation rule.

Other Natural Resources Impacts

The original M1+E-H alternative in the DEIS included 9.6 acres of impact to High Quality Waters Watershed (HQW, ORW, WS or Critical Areas). The M1+E-H with Option 6TR (Preferred) and service roads the impact has more than doubled at 20.72 acres of impact. Similarly, 100-Year Floodplain and Floodway impacts went from 11.73 acres from the DEIS (and LEDPA) to 28.69 acres for the M1+E-H with Option 6TR (more than double). The Preferred M1+E-H with Option 6TR with service roads increased the 100-Year Floodplain and Floodway impacts to 33.08 acres. Table S-1 in the SDEIS does not provide a breakdown of the 20.09 acres of impacts to HQW, ORW or Water Supply protected or critical areas.

Terrestrial forest impacts increased from the DEIS from 512.12 acres to 521.59 acres for the preferred M1+E-H with Option 6TR alternative. The service roads will contribute an additional 31.39 acres to total 552.98 acres (0.84 of a square mile) for M1+E-H with Option 6TR with service roads.

The preferred alternative M1+E-H with Option 6TR is anticipated to impact 4.41 acres of Natural Heritage Program Significant Natural Heritage Areas (NHP-SNHA) and Wetland Mitigation Sites that were created and preserved by the NCDOT to address compensatory mitigation needs for the I-140/US 17 Wilmington Bypass project. The impact was reduced by the transportation agencies from the DEIS stage by 0.02 acres

The proposed project is expected to 'take' 1 cluster of the Federally-protected endangered species Red-Cockaded Woodpecker (RCW). The transportation agencies revised the original LEDPA design of the northern interchange to potentially avoid an additional RCW 'take' (Page 5-22). As stated in EPA's letter on the DEIS, EPA defers to the USFWS (and NCWRC) on matters pertaining to Section 7 of the Endangered Species Act (ESA). EPA is requesting copies

of the Biological Assessment and Biological Opinion upon their issuance for NEPA and Clean Water Act Section 404 documentation purposes.

Human Resources Impacts

Residential and business relocations were significantly reduced by NCDOT and USACE avoidance and minimization measures from the DEIS M1+E-H LEDPA to the M1+E-H with Option 6TR (Preferred) alternative from 61 and 84 vs. 53 and 39, respectively. Residential relocations (displacements) were reduced by more than 13%. Business relocations have been reduced by more than 53%. EPA acknowledges that 4 non-profits were broken out from the DEIS business relocations to a separate category in Table S-1. EPA recognizes that these numbers are different than those presented in Table 2 of the SDEIS and was presented to the Merger team at the May 2012 LEDPA meeting. Table 2 shows that there were 64 residences, 76 businesses and 5 non-profits for M1+E-H (DEIS DSA and LEDPA). NCDOT and USACE may wish to discuss in the FEIS why similar avoidance and minimization efforts were not fully employed for other DSAs that were considered in the DEIS in comparison to the M1+E-H LEDPA and M1+E-H with Option 6TR alternative.

Table S-1 indicates that the LEDPA M1+E-H has 0 impacts to archeological sites. However, there is a note for M1+E-H option 6TR (Preferred), service roads and M1+E-H option 6TR with service roads that archeological surveys are underway and will not be completed or presented until the FEIS. However, Project Commitment #1, page 1 of 4 states that a National Register eligible archeological site was identified (31PD344**) for M1+E-H option 6TR (Preferred) and that an MOU between the USACE, SHPO and NCDOT may be required outlining the mitigation measures for the adverse effect to the site. The information contained in the SDEIS is inconsistent and should be clearly presented and corrected in the FEIS. We defer to the SHPO if a Memorandum of Agreement (MOA) between the USACE, SHPO and NCDOT is required for this archeological site in order to address the mitigation measures..

The USACE is required to address compliance with Section 106 of the National Historic Preservation Act for the adverse effect on the National Register-eligible Mount Ararat AME Church (Pages S-6 and 5-12). An additional MOA between the USACE, SHPO and NCDOT is required outlining mitigation measures for the adverse effect. This unresolved Section 106 issue is not identified in the Project Commitments ('Green Sheets').

Noise receptor impacts have not been updated in the SDEIS. A note is contained in Table S-1 that impacted noise receptors will be evaluated in the final design for the project for M1+E-H option 6TR (Preferred), service roads and M1+E-H option 6TR with service roads. DEIS impacts showed 257 impacted noise receptors for M1+E-H (Tables S-1 and 2). A noise receptor impact comparison for the other DSAs was not conducted in the SDEIS.

The proposed project is expected to impact the Topsail High School wastewater package treatment plant. In addition, the new project design for the northern interchange also impacts the Pender County Recycling Center adjacent to Topsail schools. The new design used reduced design criteria and avoided the water tower located along US 17 adjacent to the Topsail schools. The SDEIS does not indicate how impacts to either the wastewater package treatment plant or

the Pender County Recycling Center will be mitigated for and the potential timing of any actions associated with these mitigation efforts. It is not clear in the SDEIS what comprises the 4 non-profit relocations (Table 7) and if these impacted community facilities are included in this total for the M1+E-H option 6TR (preferred) Alternative.

As with noise receptor impacts, the SDEIS did not provide an update to impacts to prime farmlands which for M1+E-H preferred from the DEIS was approximately 68 acres (The highest impact to prime farmlands of the alternatives considered under the LEDPA). As stated in Table S-1, prime farmland impacts will be updated in the FEIS for M1+E-H option 6TR (preferred). Impacts to prime farmlands from the proposed 5.2 miles of service roads are also not identified.

The proposed preferred alternative (M1+E-H with option 6TR) includes impacts to 3 cemeteries and 5 potential UST/Hazardous material sites.

Other Outstanding Issues

The SDEIS indicates that the issue of conservation areas in the project study are unchanged and refers the reader several sections in the DEIS, including the discussions concerning indirect and cumulative effects related to development in Section 4.6 of the DEIS. The NCDOT and USACE now propose a new interchange north of Topsail High School and in close proximity to Holly Shelter Gamelands and other large undeveloped tracts of wetlands and woodlands being utilized by RCW and other wildlife species. This proposed interchange also impacts approximately 20 acres of wetlands. Indirect impacts to water quality can be expected from highway runoff into adjacent remaining wetlands (e.g., PD-38, MWA). It is also contrary to numerous prior development activities in this area of coastal N.C. that a new interchange did not induce additional development in and around a new access point so close to an existing US highway. EPA requests that a full indirect and cumulative effects analysis be prepared for this proposed project and provided in the FEIS.

It is unclear from the SDEIS if the USACE supports the NCDOT's M1+E-H option 6TR alternative (preferred) and if this alternative is considered to be the new LEDPA. EPA requests that the FEIS provide clarification regarding statements in the SDEIS that the original M1+E-H alternative will be the LEDPA if RCW foraging habitat 'ceases to exist' at the time of permitting. The FEIS should identify the LEDPA and the quantified impacts to all human and natural environment resources from the proposed project. The NCDOT proposes to issue a State Record of Decision (SROD) after the FEIS. EPA requests a copy of the State ROD upon its issuance.

Attachment B

Summary of EPA's Merger Process Issues
Supplemental Draft Environmental Impact Statement
US 17, Hampstead Bypass and Military Cutoff Road Extension, New Hanover and Pender
Counties, TIP Nos.: R-3300 and U-4751

Summary

As a Partnering Agency to the 2005 NCDOT/USACE/FHWA/NCDENR NEPA/Section 404 Merger Process Memorandum of Understanding (MOU), EPA has been an active participant in the multi-agency, collaborative process. EPA's Merger Team representative conditionally concurred on the LEDPA (M1) for U-4751 due to potential direct impacts to the Cape Fear Public Utility Authority's wellheads and after assurances was provided that these impacts could be avoided. EPA did not concur on Alternative E-H as the LEDPA for R-3300. EPA has further abstained on CP 4A, avoidance and minimization for R-3300 (The EPA abstention briefs are included in the appendix to the SDEIS). Furthermore, many of EPA's detailed comments on the DEIS were not addressed in CP 4A meetings or the SDEIS and are being deferred to the FEIS.

EPA's Merger team representative has continued concerns over the NEPA/Section 404 Merger team process and the opportunities to problem-solve as a team and fully evaluate detailed environmental issues (e.g., the location of all residential and business relocations for DSA U and the specific design assumptions being used for that alternative). These concerns have become much clearer since NCDOT was able to avoid 13% and 59% of the residential and business relocations, respectively, following the LEDPA meeting for alternative M1+E-H. These concerns are further highlighted by the recent meeting scheduled with the NCEEP concerning compensatory mitigation but that the NCDOT has refused to schedule a follow-up meeting that fully assesses the LEDPA M1+E-H compared to M1+E-H option 6TR with service roads and other DSAs (e.g., Alternative U) that were eliminated as the LEDPA. Currently accepted 'CP 4A' measures such as 3:1 side slopes in jurisdictional areas is expected by the EPA Merger team representative to be brought back for revisions in the future due to NCDOT's ultimate desire to raise the grade of the new multi-lane facility by 4 to 6 feet and avoid the use of reportedly 'unsafe' guardrails. This 'late' process issue has come up after CP 4A on numerous coastal highway projects in the last several years. Ultimately, the USACE and other Merger team agencies (except EPA) have agreed to these post-CP 4A design changes and it has resulted in additional wetland and stream impacts.

The USACE is a project proponent and has signed the DEIS and SDEIS as the Lead Federal Agency under NEPA. The USACE is also the Merger Team Project Leader and the primary Federal permitting agency. The USACE has signed the LEDPA concurrence form and had the Merger team signatures on the LEDPA prior to the discovery of a new interchange, constructing a 6-lane facility instead of 4 lanes, and the need for additional service roads. All of these potential changes to the original M1+E-H alternative resulted in additional and substantial jurisdictional impacts. For this reason, EPA's Merger Team representative abstained on CP 4A

and requested that a SDEIS be considered by the transportation agencies. The final LEDPA selection process should be clarified in light of the statement on Page 4-5 concerning the selection by the USACE of either M1+E-H with Option 6TR or the original M1+E-H as the future permitted LEDPA.

There are also unresolved issues concerning endangered species and EPA is requesting that the Merger team be kept informed as to the potential resolution of issues concerning the RCW and other Federally-protected species.



North Carolina Department of Administration

Pat McCrory, Governor

Bill Daughtridge, Jr., Secretary

December 10, 2013

Ms. Kim Gillespie North Carolina Department of Transportation Transportation Building 1548 Mail Service Center Raleigh, North Carolina 27699-1548

Re: SCH File # 14-E-4220-0204; DEIS; Supplemental DEIS - Military cutoff extension from US 17 (Market Street) to the proposed I-140 in New Hanover County & US 17 bypass of Hampstead in New Hanover & Pender counties.

Dear Ms. Gillespie:

The above referenced environmental impact information has been reviewed through the State Clearinghouse under the provisions of the North Carolina Environmental Policy Act.

Attached to this letter are comments made in the review of this document. The comment(s) need to be addressed in the Final Environmental Impact Statement. This document should be submitted to the State Clearinghouse upon completion for compliance with the North Carolina Environmental Policy Act.

Sincerely,

Crystal****Best

State Environmental Review Clearinghouse

tal Best

Attachments

cc: Region O



North Carolina Department of Administration

Pat McCrory, Governor

Bill Daughtridge, Jr., Secretary

January 10, 2014

Ms. Kim Gillespie North Carolina Department of Transportation Transportation Building 1548 Mail Service Center Raleigh, North Carolina 27699-1548

Re: SCH File # 14-E-4220-0204; Supplemental DEIS - Military cutoff extension from US 17 (Market Street) to the proposed I-140 in New Hanover County & US 17 bypass of Hampstead in New Hanover & Pender counties.

Dear Ms. Gillespie:

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are <u>additional comments</u> made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

Crystal Best

uptal Best

State Environmental Review Clearinghouse

Attachments

cc: Region O

Mailing Address: 1301 Mail Service Center Raleigh, NC 27699-1301 Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail state.clearinghouse@doa.nc.gov

Location Address: 116 West Jones Street Raleigh, North Carolina

NORTH CAROLINA STATE CLEARINGHOUSE DEPARTMENT OF ADMINISTRATION INTERGOVERNMENTAL REVIEW

COUNTY: NEW HANOVER

PENDER

F02: HIGHWAYS AND ROADS

STATE NUMBER:

14-E-4220-0204

DATE RECEIVED:

11/07/2013 AGENCY RESPONSE: 12/04/2013

REVIEW CLOSED: 12/09/2013

MS ELIZABETH HEATH CLEARINGHOUSE COORDINATOR DEPT OF AGRICULTURE 1001 MSC - AGRICULTURE BLDG RALEIGH NC

REVIEW DISTRIBUTION

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CC&PS - DIV OF EMERGENCY MANAGEMENT

DENR - COASTAL MGT

DENR LEGISLATIVE AFFAIRS

DEPT OF AGRICULTURE

DEPT OF CULTURAL RESOURCES

DEPT OF TRANSPORTATION

PROJECT INFORMATION

APPLICANT: N.C. Department of Transportation

TYPE: National Environmental Policy Act

Draft Environmental Impact Statement

DESC: Supplemental DEIS - Military cutoff extension from US 17 (Market Street) to the

proposed I-140 in New Hanover County & US 17 bypass of Hampstead in New Hanover &

Pender counties.

CROSS-REFERENCE NUMBER: 06-E-4220-0107 12-E-4220-0061

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

] NO COMMENT X COMMENTS ATTACHED AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:





Steven W. Troxler Commissioner

North Carolina Department of Agriculture and Consumer Services

Keith Larick
Environmental Programs

Agricultural Services

December 5, 2013

Valerie McMillan NC State Clearinghouse N.C. Department of Administration 1301 Mail Service Center Raleigh, North Carolina 27699-1301

State #: 14-E-4220-0204

RE: Military Cutoff extension and US-17 Bypass

Dear Ms. McMillan:



The proposed route options for the Military Cutoff extension and US-17 Bypass construction in New Hanover County have the potential of irreversible damage and increases the loss of state important farm and forest land in the immediate area. The NCDOT is encouraged to give due consideration of routing and/or designs that would reduce the potential of negative environmental and economic impacts on farm and forest land in the proposed work area and choose a route that limits these damages.

Farm and forest lands are natural resources with no mitigation process. These agribusiness resources cannot be replaced nor relocated once converted to other uses. Construction of the Military Cutoff extension and US-17 Bypass should preference designs that reduce potential negative impacts on farms and forest land. These plans should also negate the formation of incompatible and inaccessible land units that degrades agricultural production capabilities associated with the area's farm and agribusinesses. The DOT selected alternative appears to impact the greatest amount of forest land and agricultural land of any of the proposed alternatives.

Agricultural production incomes from locally grown products have a considerable multiplier influence. It is estimated that for every 40 acres converted from agricultural production, one agribusiness job and its associated economic activity is lost indefinitely. Furthermore the costs of community services used by agribusiness are usually minimal and therefore are net contributors to county budgets. Both current and future cost for the conversion land from production agriculture is needed for an accurate evaluation which is not accurately recognized by the Farmland Conversion Impact Rating using Form AD 1006.

Based on the secondary, cumulative, and direct impacts, this project has potential to adversely impact the agricultural environmental and economic resources. The total negative impact on the environmental and agribusiness economy will be proportionately related to the total acres of farm and forest land taken out of production.

Respectfully,

Keith Larick

Environmental Programs Specialist

NORTH CAROLINA STATE CLEARINGHOUSE DEPARTMENT OF ADMINISTRATION INTERGOVERNMENTAL REVIEW

COUNTY: NEW HANOVER

PENDER

FO2: HIGHWAYS AND ROADS

STATE NUMBER:

14-E-4220-0204

DATE RECEIVED:

11/07/2013

AGENCY RESPONSE: 12/04/2013

REVIEW CLOSED: 12/09/2013

MS CAROLYN PENNY

CLEARINGHOUSE COORDINATOR

CC&PS - DIV OF EMERGENCY MANAGEMENT

FLOODPLAIN MANAGEMENT PROGRAM

MSC # 4719

RALEIGH NC



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DENR LEGISLATIVE AFFAIRS

DEPT OF AGRICULTURE

DEPT OF CULTURAL RESOURCES

DEPT OF TRANSPORTATION

PROJECT INFORMATION

APPLICANT: N.C. Department of Transportation

TYPE: National Environmental Policy Act

Draft Environmental Impact Statement

DESC: Supplemental DEIS - Military cutoff extension from US 17 (Market Street) to the proposed I-140 in New Hanover County & US 17 bypass of Hampstead in New Hanover &

Pender counties.

CROSS-REFERENCE NUMBER: 06-E-4220-0107 12-E-4220-0061

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: NO COMMENT COMMENTS ATTACHED DATE: 05 DEC ZOI3

MOA COMMITMENT ADDRESSED.

NORTH CAROLINA STATE CLEARINGHOUSE DEPARTMENT OF ADMINISTRATION INTERGOVERNMENTAL REVIEW

COUNTY: NEW HANOVER

PENDER

FO2: HIGHWAYS AND ROADS

MISTORIC PRESERVATION OFFICE

STATE NUMBER:

14-E-4220-0204

DATE RECEIVED: 11/07/2013

AGENCY RESPONSE: 12/04/2013

REVIEW CLOSED: 12/09/2013

MS RENEE GLEDHILL-EARLEY CLEARINGHOUSE COORDINATOR DEPT OF CULTURAL RESOURCES STATE HISTORIC PRESERVATION OF LO MSC 4617 - ARCHIVES BUILDING

RALEIGH NC

ER 05-243

REVIEW DISTRIBUTION

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DENR - COASTAL MGT

DENR LEGISLATIVE AFFAIRS

DEPT OF AGRICULTURE

DEPT OF CULTURAL RESOURCES

DEPT OF TRANSPORTATION

Dur Hates 5- Whe request

Due 12/3/13 A

PROJECT INFORMATION

APPLICANT: N.C. Department of Transportation

TYPE: National Environmental Policy Act Draft Environmental Impact Statement

DESC: Supplemental DEIS - Military cutoff extension from US 17 (Market Street) to the proposed I-140 in New Hanover County & US 17 bypass of Hampstead in New Hanover & Pender counties.

CROSS-REFERENCE NUMBER: 06-E-4220-0107 12-E-4220-0061

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:

NO COMMENT

COMMENTS ATTACHED





North Carolina Department of Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Pat McCrory Secretary Susan Kluttz

Office of Archives and History Deputy Secretary Kevin Cherry

October 15, 2013

MEMORANDUM

TO:

Matt Wilkerson

Office of Human Environment NCDOT Division of Highways

FROM:

Ramona M. Bartos

SUBJECT:

Archaeological Report: Archaeological Survey and Evaluation of the Proposed Military Cutoff Road

Extension and US 17 Hampstead Bypass in New Hanover and Pender Counties, U-4751 and R-3300,

ER 05-2123

We have reviewed the archaeological report produced by Coastal Carolina Research, Inc. (CCR) for the Military Cutoff Road Extension and the Hampstead Bypass.

Kelly Ramona M. Ball

The area of potential effect (APE) was defined as a 33.5 mile corridor running roughly parallel to US 17 between Ogden (New Hanover County) and Hampstead (Pender County). The archaeological survey consisted of 133 acres intensively surveyed and 158 acres visually surveyed that focused on areas where local topography and hydrology suggested a medium to high probability for encountering significant archaeological resources.

As a result of this survey nine archaeological sites were identified. Eight of these sites were recommended ineligible for listing on National Register of Historic Places (NRHP). Seven of these sites were historic in nature and included three cemeteries and four probable historic occupation sites. Only one of the ineligible sites contained prehistoric artifacts. We concur with the recommendations that these sites are not eligible for listing on the NRHP and that no further archaeological work is necessary with the exception of any affected cemeteries that may require treatment under the provisions of N.C.G.S 65-13.

One historic period site, 31PD344**, was recommended by CCR as eligible for inclusion on the NRHP. This site is a short-term mid to late18th century domestic site characterized by on-site commercial extraction of local forest products. Because this site is relatively intact and represents a discreet occupation it has the potential to yield information on the lifeways of 18th century lower socio-economic people not directly associated with the domestic core of the plantation. We concur with the recommendation for NRHP eligibility and look forward to reviewing plans for mitigation through additional data recovery or avoidance.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment please contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above referenced tracking number.



North Carolina Department of Environment and Natural Resources

Pat McCrory Governor John E. Skvarla, III Secretary

MEMORANDUM

To:

Crystal Best

State Clearinghouse

From:

Lyn Hardison M

Division of Environmental Assistance and Customer Service Environmental Assistance and Project Review Coordinator

RE:

14-0204

Draft Environmental Impact Statement - Supplement DEIS

Military cutoff extension from US 17 (Market Street) to the proposed I-140 in New

New Hanover and Pender Counties

Date:

December 10, 2013

The Department of Environment and Natural Resources has reviewed the proposal for the referenced project. Based on the information provided, our agencies have identified permits that may be required. The Division of Water Resources Water Quality Program has requested clarification on the presence of 303(d) waters and more detail of the indirect and cumulative impacts analysis. Please forward this memorandum and the attachments to the applicant so the concerns can be addressed and the necessary adjustments can be made to the report.

The Department encourages the applicant to continue communicating with the agencies and address their concerns prior to the issuance of the FONSI and moving forward with the project.

Thank you for the opportunity to respond.

Attachment



North Carolina Department of Environment and Natural Resources Division of Coastal Management

Pat McCrory Governor

Braxton C. Davis Director

John E. Skvarla, III Secretary

MEMORANDUM

TO:

Lyn Hardison, Environmental Assistance Coordinator

Environmental Assistance and Customer Service

CC:

Richard W. Hancock, PE, NCDOT Project Development &

Environmental Analysis Manager

Doug Huggett, DCM Manager, Major Permits & Federal Consistency

FROM:

Steve Sollod, DCM Transportation Project Coordinator 503

DATE:

December 4, 2013

SUBJECT:

State Clearinghouse Review

Supplemental Draft Environmental Impact Statement Comments

Proposed SR 1409 (Military Cutoff Road) Extension and Proposed US 17 Hampstead

Bypass, New Hanover and Pender Counties, TIP Projects U-4751 and R-3300

Project Review No. 14-0204 and Project No. 12-0061

The North Carolina Division of Coastal Management (DCM) has reviewed the Supplemental Draft Environmental Impact Statement for the above referenced project, which was submitted to the NC State Clearinghouse for intergovernmental review. We appreciate the opportunity to provide information relevant to the potential authorization of the proposed project by our agency and offer the following comments.

The purpose of the Supplemental Draft Environmental Impact Statement is to document changes to the proposed project that have occurred since the release of the Draft Environmental Impact Statement, dated July 2011. Those changes were brought about by citizens' concerns during the corridor public hearings for the project. The changes include the construction of an additional interchange and an additional lane in each direction at the northern end of the US 17 Hampstead Bypass. This alternative, M1+E-H Option 6TR, is intended to address traffic capacity associated with the Topsail School complex and is NCDOT's preferred alternative. DCM does not object to consideration of Option 6TR.

As a member of the NEPA/Section 404 Merger Team, DCM concurred on Concurrence Point CP 3, Least Environmentally Damaging Practicable Alternative (LEDPA), on May 17, 2012, as well as the Concurrence Point CP 4a, Avoidance and Minimization, for the proposed Military Cutoff Road Extension, U-4751, on July 19, 2012 and CP 4a, for the US 17 Hampstead Bypass, R-3300, on June 13, 2013. DCM will continue to be an active participant on the Merger Team.

As stated in DCM's comments on the Draft Environmental Impact Statement, the proposed project will not impact a Coastal Area Management Act (CAMA) Area of Environmental Concern (AEC) as defined by the rules of the NC Coastal Resources Commission. Therefore, the proposed project will not require a CAMA Permit. However, in accordance with the provisions of Federal Consistency under the Federal Coastal Zone Management Act and the associated regulations, 15 CFR 930, the applicant (NCDOT) is required to evaluate the proposed project and certify to DCM and US Army Corps of Engineers (USACE) that the project is consistent with the NC Coastal Management Program.

If you have any questions or concerns, please contact me at (919) 707-9152, or via e-mail at steve.sollod@ncdenr.gov. Thank you for your consideration of the North Carolina Coastal Management Program.



North Carolina Department of Environment and Natural Resources

Pat McCrory Governor Division of Water Resources . Water Quality Programs Thomas A. Reeder Director

John E. Skvarla, III Secretary

December 4, 2013

MEMORANDUM

To:

Lyn Hardison, Environmental Coordinator, Office of Legislative and Intergovernmental

Affairs

From:

Mason Herndon, Division of Water Resources, Fayetteville Regional Office,

Transportation Permitting Unit

Subject:

Comments on the Supplemental Draft Environmental Impact Statement, related to proposed SR 1409 (Military Cutoff Road) extension and the proposed Hampstead Bypass (US 17), New Hanover and Pender Counties, Federal Aid Project No. State Project No.

4091.1.2, TIPs U-4751 and R-3300, State Clearinghouse Project No. 14-0204

This office has reviewed the referenced document dated September, 2013. The NC Division of Water Resources (NCDWR) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the project as presented will result in impacts to jurisdictional wetlands, streams, and other surface waters. The NCDWR offers the following comments based on review of the aforementioned document:

Project Specific Comments:

- 1. This project is being planned as part of the 404/NEPA Merger Process. As a participating team member, the NCDWR will continue to work with the team.
- Review of the project reveals the presence of surface waters classified as SA; High Quality Waters
 of the State in the project study area. This is one of the highest classifications for water
 quality. Provided the project meets the requirements of NCDOT NPDES permit NCS000250, no
 application for individual State Stormwater permit will be required (Streamlining State Stormwater
 Permitting for NCDOT Projects letter, July 26, 2013).
- 3. Review of the project reveals the presence of surface waters classified as SA; Outstanding Resource Waters of the State in the project study area. The water quality classification of SA; ORW is one of the highest classifications in the State. The NCDWR is extremely concerned with any impacts that may occur to streams with this classification. It is preferred that these resources be avoided if at all possible. If it is not possible to avoid these resources, the impacts should be minimized to the greatest extent possible. Given the potential for impacts to these resources during the project implementation, the NCDWR requests that the NCDOT strictly adhere to North Carolina

Transportation and Permitting Unit 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Location: 512 N. Salisbury St. Raleigh, North Carolina 27604 Phone: 919-807-6300 \ FAX: 919-733-1290 Internet: www.ncwaterguality.org

NorthCarolina Naturally

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regulations entitled "Design Standards in Sensitive Watersheds" (15A NCAC 04B .0124) throughout design and construction of the project.

Provided the project meets the requirements of NCDOT NPDES permit NCS000250, no application for individual State Stormwater permit will be required (*Streamlining State Stormwater Permitting for NCDOT Projects* letter, July 26, 2013).

- 4. Section 5.7 (Indirect and Cumulative Effects) makes reference to an updated Indirect and Cumulative Effects Analysis being prepared. The NCDWR request that the proposed service roads noted in the supplement be included in the analysis and that NCDWR is provided a copy of this report when completed.
- 5. It is stated in the DEIS dated July, 2011 that there are no waters in the project area that are listed on the 303(d) list. NCDWR comments on the DEIS dated October 13, 2011 notes that it was not stated from which 303(d) list the information was derived and that the information should be based on the most recent list which would be from 2010. This concern was not addressed in the supplement. The 2010 303(d) list has all waters in the state listed as impaired based on statewide fish consumption advisory due to elevated mercury level and there may be other listings that are not included in the document if the information in the DEIS was obtain from an older list. The FEIS should address the absence or presence of 303(d) waters within the project area based on the most recent list.

General Comments:

- 6. The environmental document should provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.
- 7. Environmental impact statement alternatives shall consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. These alternatives shall include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of the NCDWR's *Stormwater Best Management Practices Manual*, July 2007, such as grassed swales, buffer areas, preformed scour holes, retention basins, etc.
- 8. After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506[h]), mitigation will be required for impacts of greater than 1 acre to wetlands. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as wetland mitigation.
- 9. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506[h]), mitigation will be required for impacts of greater than 150 linear feet to any single stream. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as stream mitigation.
- Future documentation, including the 401 Water Quality Certification Application, shall continue to include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.

- 11. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The NCDOT shall address these concerns by describing the potential impacts that may occur to the aquatic environments and any mitigating factors that would reduce the impacts.
- 12. An analysis of cumulative and secondary impacts anticipated as a result of this project is required. The type and detail of analysis shall conform to the NC Division of Water Resources Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.
- 13. The NCDOT is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, and rip rap to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.
- 14. The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater shall not be permitted to discharge directly into streams or surface waters.
- 15. Based on the information presented in the document, the magnitude of impacts to wetlands and streams may require an Individual Permit application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the NCDOT and written concurrence from the NCDWR. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.

The NCDWR appreciates the opportunity to provide comments on your project. Should you have any questions or require any additional information, please contact Mason Herndon at (910) 308-4021 or mason.herndon@ncdenr.gov.

ec: Brad Shaver, US Army Corps of Engineers, Wilmington Field Office Stoney Mathis, Division 3 Environmental Officer Travis Wilson, NC Wildlife Resources Commission Steve Sollod, NC Coastal Management Ron Lucas, Federal Highway Administration Chris Militscher, Environmental Protection Agency Gary Jordan, US Fish and Wildlife Service Jackie Roddy, NCDWR Hannah Headrick, NCDWR, Water Quality Programs Sonia Carrillo, NCDWR Central Office File Copy

Department of Environment and Natural Resources Project Review Form

Project Number: 14-0204	County;	New Hanover and Pend	er Date Received: 11/07/201
	D	ie Date: 12/4/2013	
Project Description: Draft Env extension County &	rironmental 1 from US 1 US 17 bypa	Impact Statement - Sur 7 (Market Street) to the pro ass of Hampstead in New I	oplemental DEIS - Military cutoff oposed I-140 in New Hanover Hanover & Pender counties,
Please refer to proj # 12-0061			ood, ittos,
This Project is being reviewed as indicated bel	ow:		
Regional Office Asheville Fayetteville Mooresville Air D DWR-Surf DWR-Aqu	e Area 12-3-1 ace Water ifer JB 11/27 Q & SW) (Q & SW)	Parks & Recreation	✓ Coastal Management ✓ DCM-Marine Fisheries J Bake Military Affairs — DMF-Shellfish Sanitation — Wildlife ✓ Wildlife — DOT — Travis Wilson
nager Sign-Off/Region: m 41 sponse (check all applicable)		Date: 12.9.13	In-House Reviewer/Agency:
No objection to project as proper Insufficient information to com		No Comment Other (specify or attach com	ments)
you have any questions, please contact Lyn Hardi 943 W	:: son at <u>lyn.har</u> ashington Sq Cou	rdison@ncdenr.gov or (252) 94 uare Mall Washington NC 278 rier No. 16-04-01	

INTERGOVERNMENTAL REVIEW - PROJECT COMMENTS

Project Number: 14-02 N Due Date: 12-4-13

After review of this project it has been determined that the ENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Pro					
·	_	of BCIAL APPLICATION PROCEDURES of REQUIREMENTS	statutory time					
b /	Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days					
	NPDES - permit to discharge into surface water and/o permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begin activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90-120 day (N/A)					
	Water Use Permit	Pre-application technical conference usually necessary	30 days (N/A)					
	Well Construction Permit	Complète application must be received and permit issued prior to the installation of a well.	7 days (15 days)					
ן	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)					
]	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q-0100 thru 2Q.0300)	Application must be submitted and permit received prior to construction and operation of the source. If a permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.0113).	90 days					
	Permit to construct & operate Transportation Facility as per 15 A NCAC (2D.0800, 2Q.0601)	Application must be submitted at least 90 days prior to construction or modification of the source.	90 days					
	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900							
r	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 20.1110 (a) (1) which requires notification and emoval prior to demolition. Contact Asbestos Control Group 919-707-5950.	N/A	60 days (90 days)					
2	Complex Source Permit required under 15 A NCAC 2D.0800							
T w ac	the Sedimentation Pollution Control Act of 1973 must be fill be required if one or more acres to be disturbed. Plan taking A fee of $$65$ for the first acre or any part of an ac-	properly addressed for any land disturbing activity. An erosion & sedimentation control plan filed with proper Regional Office (Land Quality Section) At least 30 days before beginning ere. An express review option isavailable with additional fees.	20 days (30 days)					
S in:	edimentation and erosion control must be addressed in ac stallation of appropriate perimeter sediment trapping devi	cordance with NCDOT's approved program. Particular attention should be given to design and ices as well as stable stormwater conveyances and outlets.	(30 days)					
	iming Permit	On-site inspection usual. Surety bond filed with ENR Bond amount varies with type mine and number of acres of affected land. Any are mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)					
No	rth Carolina Burning permit	On-site inspection by N.C. Division Forest Resources if permit exceeds 4 days	I day (N/A)					
Spe	ecial Ground Clearance Burning Permit - 22 anties in coastal N.C. with organic soils	On-site inspection by N.C. Division Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)					
Oil I	Refining Facilities	N/A S	0-120 days (N/A)					

-	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Tin (statutory time limit
	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with ENR running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to ENR rules and regulations.	10 days N/A
	The state of the s	Application filed with ENR at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days
	TOTAL CONTROL OF THE	Applicationfee is charged based on structure size. Must include descriptions & drawings of structure & proof of ownership of riparianproperty.	N/A 15-20 days N/A
	- Sound Columnian	N/A	60 days (130 days)
	To MINON Development	\$250.00 fee must accompany application	55 days (150 days)
	CAMA Permit for MINOR development	\$50.00 fee must accompany application	22 days
	N.C. Geodetic Survey, Box 27687 R	oject area. If any monument needs to be moved or destroyed, please notify:	(25 days)
	Abandonment of any wells, if required must be in accorda	unce with Title 15A. Subchanter 2C 0100	
7		orphan" underground storage tanks (USTS) are discovered during any excavation operation.	
5	Compliance with 15A NCAC 2H 1000 (Coastal Stormwate	er Rules) is required	45.4
	Tar Pamlico or Neuse Riparian Buffer Rules required.	,	45 days (N/A)
	specifications should be submitted to 1634 Mail Service Cer with state and federal drinking water monitoring requiremen	alteration of a public water system must be approved by the Division of Water of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq. Plans and nter, Raleigh, North Carolina 27699-1634. All public water supply systems must comply its. For more information, contact the Public Water Supply Section, (919) 707-9100.	30 days
	If existing water lines will be relocated during the construction Resources/Public Water Supply Section at 1634 Mail Service Water Supply Section, (919) 707-9100.	on, plans for the water line relocation must be submitted to the Division of Water e Center, Raieigh, North Carolina 27699-1634. For more information, contact the Public	30 days
Ut	ther comments (attach additional pages as necessary, being o	ertain to cite comment authority)	
			##

REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

Asheville Regional C)ffice
:090 US Highway 70	
Swannanoa, NC 2877	8
(828) 296-4500	

☐ Fayetteville Regional Office 225 North Green Street, Suite 714 Fayetteville, NC 28301-5043 (910) 433-3300

·

Mooresville Regional Office 610 East Center Avenue, Suite 301 Mooresville, NC 28115 (704) 663-1699

☐ Raleigh Regional Office 3800 Barrett Drive, Suite 101 Raleigh, NC 27609 (919) 791-4200

☐ Washington Regional Office 943 Washington Square Mall Washington, NC 27889 (252) 946-6481

☐ Wilmington Regional Office 127 Cardinal Drive Extension Wilmington, NC 28405 (910) 796-7215

 $\hfill\square$ Winston-Salem Regional Office 585 Waughtown Street Winston-Salem, NC 27107 (336) 771-5000



Gordon Myers, Executive Director

MEMORANDUM

TO:

Lyn Hardison, Environmental Assistance Coordinator

Division of Environmental Assistance and Outreach, DENR

FROM:

Travis Wilson, Highway Project Coordinator

Habitat Conservation Program

DATE:

December 4, 2013

SUBJECT:

North Carolina Department of Transportation (NCDOT) supplemental Draft

Environmental Impact Statement (DEIS) for the proposed SR 1409 extension and

the proposed improvements to US 17 in New Hanover and Pender Counties. North Carolina. TIP Nos. U-4751 and R-3300 SCH Project No. 14-0204

Staff biologists with the N. C. Wildlife Resources Commission have reviewed the subject supplemental DEIS and are familiar with habitat values in the project area. The purpose of this review was to assess project impacts to fish and wildlife resources. Our comments are provided in accordance with certain provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

Two projects have been combined and are included in the DEIS. For project U-4751 the NCDOT is proposing to extend Military Cutoff Road from Market Street to the US 17 Bypass, and R-3300 consist of improvements to US 17 from the existing US 17 Bypass north to include a bypass of Hampstead. The projects are being planned under the NEPA/Section 404 Merger 01 Process. WRC is represented in this process and comments provided in conjunction with this process have been documented. WRC also provided comments, dated October 19, 2011, on the DEIS, comments provided in that memorandum are still applicable. At this time we do not have additional specific concerns related to the information provided in the supplemental DEIS.

This project will continue to go through the NEPA/Section 404 Merger process, and additional agency coordination will occur through the remaining concurrence points. Thank you

for the opportunity to comment. If we can be of further assistance please call me at (919) 707-0370

cc: Gary Jordan, USFWS

David Wainwright, DWQ Brad Shaver, USACE Chris Militscher, EPA

APPENDIX E NCDOT RELOCATION ASSISTANCE PROGRAM / RELOCATION REPORTS

DIVISION OF HIGHWAYS RELOCATION PROGRAM

The relocation program for the proposed action will be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Public Law 91-646), and/or the North Carolina Relocation Assistance Act (GS-133-5 through 133-18). The program is designed to provide assistance to displaced persons in relocating to a replacement site in which to live or do business. At least one relocation agent is assigned to each highway project for this purpose.

The relocation agent will determine the needs of displaced families, individuals, businesses, non-profit organizations, and farm operations for relocation assistance advisory services without regard to race, color, religion, sex or national origin. The NCDOT will schedule its work to allow ample time, prior to displacement, for negotiations and possession of replacement housing which meets decent, safe, and sanitary standards.

The displacees are given a 90 Day Letter of Assurance after the initiation of negotiations, or in the case of residential displacees, only after a comparable replacement dwelling has been offered to the displacee. This letter assures that that displacee will have at least 90 days from the date of the letter to move. Once the claim has been closed or condemnation has begun, a 30 Day Notice to Vacate letter will be sent to the displacee with the final date to vacate indicated. At no time will the final vacate date be less than the 90 days assured to the displacee.

For Residential Displacees:

It is the policy of NCDOT to ensure comparable replacement housing will be available prior to construction of state and federally-assisted projects. No person will be displaced by NCDOT's State or Federally-assisted construction projects unless and until comparable replacement housing has been offered or provided for each displace within a reasonable period of time prior to displacement. All attempts will be made to find decent, safe, and sanitary replacement dwellings within the financial means of the residential displacee. NCDOT offers the following relocation assistance to residential displacees:

- Replacement Housing Payment for Owner-Occupant displacees
- Rent Supplement Payment for Tenant Displacees
- Relocation Moving Payments
- Advisory Services

Last Resort Housing is a program used when comparable replacement housing is not available, or when it is unavailable within the displacee's financial means, and the replacement payment exceeds the federal/state legal limitation. The purpose of the program is to allow broad latitude in methods of implementation by the State so that decent, safe, and sanitary replacement housing can be provided.

Non-Residential Displacees:

Displaced Businesses, Farms, and Non-Profit Organizations are eligible for the following relocation assistance:

- Relocation Moving Expenses
- Reestablishment Reimbursement up to the maximum Federal amount
- Searching expenses up to the maximum Federal amount
- Business Fixed Payment up to the Federal maximum (in lieu of the items above)
- Advisory Services

No relocation payment received will be considered as income for the purposes of the Internal Revenue Code of 1954 or for the purposes of determining eligibility or the extent of eligibility of any person for assistance under Social Security Act or any federal law.

These relocation benefits are only available to persons lawfully present in the United States.

EIS RELOCATION REPORT

North Carolina Department of Transportation RELOCATION ASSISTANCE PROGRAM

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EIS RELOCATION REPORT

North Carolina Department of Transportation RELOCATION ASSISTANCE PROGRAM

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<u>U-4751 Business Relocations</u> <u>ALTERNATIVES M1 and M2</u>

	GROUPING	NAME	TYPE	NUMBER OF EMPLOYEES	MINORITY
1		Ogden Volunteer Rescue	Business	15-20	
2		BPA	Business	25-30	
3	Pages Creek Marina	Pages Creek Marina	Business	5-10	
4	Pages Creek Marina	Truck Pump	Business	1-3	
5	Pages Creek Marina	Blue Water Works	Business	1-3	
6	Pages Creek Marina	MK Design	Business	1-3	
7		Dentist Office	Business	5-8	
8		Children Daycare	Bus/School	0	
9 10	Shopping Center	BT Imports (Boating) Painters Alley	Business Business	5-8 2-4	
11	Shopping Center	State Farm Insurance	Business	2-4	
12	Shopping Center Shopping Center	Landscape Business	Business	4-6	
13	Shopping Center	Sun Trust Bank	Business	5-10	
14	Shopping Center	Cardinal Bowing Lanes	Business	5-10	
15	Chopping Conto	Little Cesar's Pizza	Bus/Rest	5-10	
16		Leon and Dick's Rib Shack	Bus/Rest	5-10	
17		Pet Boarding/Care	Business	4-6	Minority
18		Shepps, LLC	Business	2-5	
19		The Pop Shoppe/CITGO	Business	10-15	
20	Live Oak Center	Allure Hair Studio	Business	2-5	
21	Live Oak Center	Port City Closets Solutions	Business	2-5	
22	Live Oak Center	Mamdi's Ice Cream	Business	2-5	
23	Live Oak Center	Lily's Nails	Business	2-4	Minority
24		Hardees's	Business	15-25	
25		Baker's Curiosity Shop	Business	2-4	
26	Zimmer's Center	Food Lion	Business	15-25	
27	Zimmer's Center	Szechuan Buffet	Business	5-10	Minority
28	Zimmer's Center	LA Nails	Business	3-5	
29	Zimmer's Center	Brooklyn Pizza Co	Business	5-10	
30	Zimmer's Center	Cubbies	Business	5-10	
31	Zimmer's Center	Liberty Tax	Business	3-5	
32	Zimmer's Center	Urgent Care	Business	5-10	
33	Zimmer's Center	All Star Subs	Business	5-8	
34	Zimmer's Center	Vacant Unit	Business	0	
35		EXXON Service Station	Business	5-10	
36 37		Dollar General	Business	8-10	
38		Walgreen's Drug Store CVS Drug Store	Business	10-15 10-15	
39		O'Leary's Auto Service	Business Business	5-8	
40		Marine Warehouse	Business	3-5	
41		South Winds	Business	2-3	Minority
42		South Hair Salon	Business	3-5	Willionty
43		Mamia's Attic	Business	2-5	
44		Jackson Hewitt Tax Service	Business	2-4	
45		Benjamin Moore Paint	Business	3-5	
46		Coastal Storage, INC	Business	3-5	
47		Stone Garden Landscaping	Business	4-8	
48		Costal Cash Exchange	Business	3-5	
49		Coastline Mower Shop	Business	3-5	Minority
50		Nixon Associates, LLC	Business	2-4	
51		Golf Driving Range	Business	2-4	
52		Fabric Solution	Business	4-6	
53		Priscilla McCall's	Business	4-6	
54		Four Season's Dry Cleaning	Business	3-5	Minority
55		Enoch Chapel	Church	5-8	
56		Enoch Chapel Graveyard (in back)	Graves		
57		Golf Range	Business	2-4	
58		Stone Garden	Business	5-10	
59		Nixon's Oyster's	Business	4-6	
60		Mini-Storage	Business	3-5	
61	-	KFC Restaurant	Business	5-10	
62		Kingfish Restaurant	Business	10-15	
63		BB&T Bank	Business	5-10	

EIS RELOCATION REPORT

North Carolina Department of Transportation RELOCATION ASSISTANCE PROGRAM

⊠ E	E.I.S. CORRIDOR DESIGN														
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		12. Ple	enty of houses listed on Realtor.com al	one.
**PLEASE NOTE: A Cell Tower v Plantation subdivision. The water			ite, as well as the Utility Water Tank odivision.	s for Belvedere
Pala	6/2/11		Pala	6/2/11
Right of Way Agent	Date		Relocation Coordinator	Date
FRM15-F Revised 09-02			Original 8 1 Capy: P.	olocation Coordinator

Original & 1 Copy: Relocation Coordinator 2 Copy Division Relocation File

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⊠ E	E.I.S. CORRIDOR DESIGN													.,	
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Farm	ıs		0		0	0	0	Owners		Tenan	ts	For	Sale	For	Rent
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Original & 1 Copy: Relocation Coordinator 2 Copy Division Relocation File

EIS RELOCATION REPORT

North Carolina Department of Transportation RELOCATION ASSISTANCE PROGRAM

⊠ E	E.I.S.		COF	RRIDOF	₹	☐ DE	SIGN					•	KELOGATI	ON ASSIG	IAIICI		JONAW
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	acees	C	Owners	Tena		Total	Minoritie	_	0-15M		15-25M		5-35M	35-50			
	dential		26		15	41 16		7 5	1/41	0	7		7		7		20
Farm	nesses		8		8	0		0	Owners	UE OF	DWELLING Tena			Sale	п		
	Profit		3		0	3		2	0-20M	0	\$ 0-150	0	0-20M	0	For Rent 0		
14011	1 TOIL			R ALL Q				_	20-40м	<u>0</u> 1	150-250	7	20-40м	2		150-250 0	
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	Х	1.				n services be	necessary	?	70-100м	2	400-600	3	70-100M 27		400-	400-600 1	
Χ		_			r churches be affected by				100 UP	22	600 UP	0	100 UP	402	600	0 UP	23
	•	displacement?							TOTAL	26		15		438			24
Χ		3. Will business services still be available									REMARK	s (Res	ond by	Number))		
after project?					2. St. Jo	ohn th	ne Apostle	Cath	olic Chu	rch, Ang	el Fo	od					
									Ministries, and Topsail Baptist Church are all displacees on this alternate.							s on	
Χ		4. Will any business be displaced? If so,						3. Busine	ess Ser	vices will 1	emain i	in the area	l .				
		indicate size, type, estimated number of									ol and Die	Co.					
		employees, minorities, etc.							Noelle Holdings, LLC Carolina Storage								
	Х	5.				e a housing s	shortage?		D&D		•						
		6. Source for available housing (list).							Carolina Outboard								
	Х	7.	Will ad		housi	ng programs	·										
Χ		8.			esort	Housing be	considered	d? Kid's Korner Daycare									
	Х	9. Are there large, disabled, elderly, etc.							Bug Off Termite and Pest Control								
		families?							Ocean Breeze Heating and Air								
	Х	10. Will public housing be needed for project?							Hidden Pond Mulch Co.								
Χ		11. Is public housing available?							Images Salon and Spa								
Χ		12. Is it felt there will be adequate DSS housing						Last Request Properties, LLC									
		housing available during relocation period?						Coastal Mini Storage along with 630 +/- storage units									
	X 13. Will there be a problem of housing within						Cypress Pond Tree Nursery										
		financial means?						Pender County Offices – 10 Different Departments									
Х		14.			sines	s sites availa	ble (list		Small Auto Sales Business (name unknown)								
		Source).							6. & 14. Realtor.com, MLS, newspaper, local ads8. As mandated by Law								
	15. Number months estimated to complete RELOCATION? 24							11. New Hanover and Pender County									
									140 W		· Ji Gila I	511GOI V	Janty				

		12. Ple	enty of houses listed on Realtor.com al	one.
**PLEASE NOTE: A Cell Tower v Plantation subdivision. The water			ite, as well as the Utility Water Tank odivision.	s for Belvedere
Pala	6/2/11		Pala	6/2/11
Right of Way Agent	Date		Relocation Coordinator	Date
FRM15-F Revised 09-02			Original 8 1 Capy: P.	olocation Coordinator

Original & 1 Copy: Relocation Coordinator 2 Copy Division Relocation File

EIS RELOCATION REPORT

North Carolina Department of Transportation RELOCATION ASSISTANCE PROGRAM

⊠ E	I.I.S.			RRIDOR		∐ DE	SIGN										
WBS: 40191.1.2		2	COUNTY		New Hanover and Pender		nd	Alternate	9	U d	of 4	•	Alternate				
I.D. NO.: R-3300 F			F.A.	F.A. PROJECT													
						to the Wilmington Bypass and Construction of											
				ampstead Bypass from Wilmington Bypass to US 17 North of Hampstead										ad			
						•	**		J	7.					•		
ESTIMATED DISPLACEES							INCOME LEVEL										
Type of																	
	Displacees		wners	Tenants		Total	Minorities	0-15M		15-25M	25	-35M	35-50		50 UP		
	dential		52		23	75	30	0		20		19	13		23		
	nesses		16		16	32	16		VALUE OF DWELLING				DWELLIN				
Farm			0		0	0	0	Owners		Tenan		For			For Rent		
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Yes	No				nswers.		200000000000000000000000000000000000000	40-70м 70-100м	12	250-400 400-600	17	40-70м 70-100м	7)-400)-600	0	
V	Х	 Will special relocation services be necessary? Will schools or churches be affected by 						100 UP	13 27	600 UP	1	100 UP	27		00 UP	1	
X	2. Will schools or club displacement?			_				52	000 OF	23	100 01	402 438		70 01	23 24		
X		3. Will business services stil			ae etill ha av	ailahla											
^		0.	after p		01 110		allabio	REMARKS (Respond by Number) 2. SEE ATTACHED SHEET FOR DISPLACED NON-PROFITS									
Χ		4.			ss be	displaced?	If so	3. Business Services will remain in the area.									
Λ		4. Will any business be displaced? If so, indicate size, type, estimated number of					4. SEE ATTACHED SHEET FOR LIST OF DISPLACED										
						BUSINESSES											
						6. & 14. Realtor.com, MLS, newspaper, local ads											
		employees, minorities, etc.					8. As mandated by Law										
	Χ	5. Will relocation cause a housing shortage?					11. New Hanover and Pender County										
		6. Source for available housing (list).					12. Plenty of houses listed on Realtor.com alone.										
	Х	7. Will additional housing programs be needed?															
Χ		8. Should Last Resort Housing be considered?															
	Χ	9. Are there large, disabled, elderly, etc.															
		families?															
	Χ	10. Will public housing be needed for project?															
Χ		11. Is public housing available?															
Χ		12. Is it felt there will be adequate DSS housing															
	housing available during relocation period? X 13. Will there be a problem of housing within																
	X	13.		-		em of housin	g within										
V		1.4		al means		oltoo avalla	blo /liot										
X		14. Are suitable business sites available (list															
		source). 15. Number months estimated to complete															
		RELOCATION? 30															

**PLEASE NOTE: A Cell Tower will be isolated by this alternate, as well as the Utility Water Tanks for Belvedere Plantation subdivision. The water tanks service the entire subdivision.

Pala	6/2/11	Palle	6/2/11
_	Date	Relocation Coordinator	Date
Right of Way Agent			

FRM15-E Revised 09-02

Original & 1 Copy: Relocation Coordinator 2 Copy Division Relocation File

Displaced Non-Profits (9 Total)

- 1) St. Stephen AMG Zion Church
- 2) Wesley Chapel United Methodist Church including 395+/- graves
- 3) Creative Minds Pre-School
- 4) Scotts Hill Baptist Church and Administrative Office
- 5) 1st Baptist Church
- 6) "Old" Scotts Hill AMG Zion Church
- 7) St. John the Apostle Catholic Church
- 8) Angel Food Ministries
- **9)** Topsail Baptist Church

Please note that in addition to the graves shown above, the McClammy and King Family Cemetary containing 17+/- graves, as well as the Pollock's Cemetary containing 235+/- graves will have to be relocated due to this alternate, for a total of 647+/- graves.

Displaced Businesses (32 Total)

- 1) A. Gil Pettit, DDS
- 2) Stone Development and Restoration
- 3) Martin Self Storage Storage Units
- 4) Eden's Produce Stand (Seasonal)
- 5) Fred's Beds
- 6) City Electric Supply
- 7) Humphrey Heating and Air
- 8) Carolina Financial Solutions
- 9) Scotts Hill Pet Resort
- **10)** Dr. Christina Baram Gray, Chiropractor
- 11) www.ScottsHill.org Computer Office
- 12) Black Dog Fence Co.
- 13) Port City Doors and Windows
- **14)** Atlantic Surgi-Center
- **15)** Sullivan Design Co.
- **16)** Chas F. Riggs and Assoc. Inc.
- 17) Scotts Hill Grille
- **18)** Poplar Grove Historic Plantation
- **19)** Tasteful Creations
- **20)** Elite Pure Spa and Boutique
- **21)** HELP (Healing, Encouraging, Loving, People)
- 22) The Good Samaritan House Thrift Store
- 23) Cottage Crafts (inside historic Browntown School / Scotts Hill Rosenwald School)
- 24) New Business under construction
- **25)** Small Businees (name unknown)
- **26)** Kid's Korner Daycare
- 27) Images Salon and Spa
- 28) Last Resort Properties, LLC
- 29) Coastal Mini Storage (630+/- units)
- **30)** Cypress Pond Nursery

- Pender County Offices 10 Different Departments Small Auto and Boat Sales business 31)
- 32)

**PLEASE NOTE: A Cell Tower will be isolated by this alternate, as well as the Utility Water Tanks for Belvedere Plantation subdivision. The water tanks service the entire subdivision.

UPDATED RELOCATION REPORTS FOR PREFERRED ALTERNATIVE (ALTERNATIVE M 1 + E-H)

EIS RELOCATION REPORT

North Carolina Department of Transportation RELOCATION ASSISTANCE PROGRAM

⊠ E	.I.S.	. CORRIDOR DESIGN																	
WBS	ELEM		191.1.2	COUNTY	New Ha	anover Alternate M1 of Alterna													
	. N o.:	U-4751				(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)													
DESC	RIPTIC	N OF PROJ	iect: Pr	oposed SI	R 1409 (M	Military Cutoff Road) Extension													
	accessor of the control of the contr	ESTIMA	TED DISPL	ACEES					NCON	IE LEVEL									
Type Displa		Owners	Tenants	Total	Minorities	0-15M		15-25M	25	-35M	VI 50) UP							
Resid		20	1	21.	1	0		0		2	2	17							
	esses	8	7	15	0	VAL	UE OF	DWELLING		DSS	DWELLIN	IG AVAILAE	VAILABLE						
Farm	s	0	0	0	0	Owners	·····	Tenar	ts	For S	Sale	For Rent							
Non-F	Profit	1	0	1	1	0-20M	0	\$ 0-150	0	0-20м	0	\$ 0-150	0						
		ANSWE	R ALL QUES	TIONS		20-40M	0	150-250	0	20-40м	0	150-250	0						
Yes	No	Explain all				40-70м	2_	250-400	0	40-70M	9	250-400	0						
	Χ	1. Will sp	ecial relocation	on services be	necessary?	70-100м	1	400-600	0	70-100м	34	400-600	0						
	Х	2. Will so	hools or chu	rches be affe	cted by	100 UP	17	600 UP	1	100 UP	491	600 UP	34						
		displac	cement?			TOTAL	20	Magazi e Pedia Paris James	1		534		34						
Х		3. Will bu	ısiness servi	ces still be av	/ailable	REMARKS (Respond by Number)													
		after p	roject?			2) Mt. Ararat AME Zion Cemetery. See note at Bottom *													
Х		4. Will an	ny business l	oe displaced?	lf so,	3) Business Services will remain available as much of the													
egas, Christian The Christian The Christian			te size, type, yees, minori	estimated กเ ties. etc.	ımber of	project area is commercial/industrial 4) Please see attached spreadsheet for business relocatees													
90, 10,00-6	Х		•	se a housing	shortage?														
		6. Source Multipl	e for availabl	le housing (lis vice, local sur	st).	8) Last Resort Housing should be a consideration. Where warranted, Last Resort housing will be applied in accordance with the Uniform Relocation Act.													
	Х		iditional hou	sing program	s be	11) Public housing is available through local agencies.													
Х			d Last Resor	t Housing be		12) Based on the availability of DSS housing available on the market, it is not felt there will be a shortage of DSS housing													
	X	9. Are the	ere large, dis	sabled, elderly	y, etc.	* Any deficiency in housing not within financial means will													
144 25 4	22.43	familie	-	•		be addressed within the guidelines of the Last Resort Housing													
Ī	X	10. Will pul	blic housing	be needed fo	r project?	Section of the Uniform Act.													
X		•	c housing a		, ,	14) Based on local survey and current real estate listings													
X		•		adequate D	SS housing	suitable business sites will be available.													
		houşin	ıg available (during relocat	ion period?														
	X *	13. Will the	ere be a prob	lem of housir	ng within			E: Mr. Sto											
		financi	ial means?			Each sto	rage	unit constit	utes a	n individu	al <mark>misc</mark> e	ellaneous							
X		14. Are sui	table busine	ss sites availa	able (list	move re	ocate	e.											
		source	•					rs are NOT					unt						
				timated to cor	F107 S20200 9 207			oted here a											
		RELOCA		to 24 Mont		Although	they	are neither	resid	ential or b	usiness	relocatee	s, they						
Individ	dual gra	aves within I	Mount Arar		nents. emetery loca	ated along	Mark	et Street w	ill be a	affected b	oth north	n of and so	outh of						
uie ili	रहा उट िरा	on with Ogo	A -	iced us	S.C.	1087036 -				05	7/1/	74							
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Russe	ell J. Ha	awke, III		47	0/14	Bradley D. Bowers 4/10/14													
	Righ	t of Way Age	nt		ete		<i>~ •</i>	Relocation C		ato) Law		['] Date							

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EMPLOYEES (P		3 1	200			3	5	2						
NAME	X Professional Builders Supply	X The Service Department	X Cape Fear Denta Implants	X Ace Sales Copany ? X Mount Ararat Church Gemetery. (Non Profit)	X Stone garden + Orsiax House Assist	X Mr. Store It · X Benjamin Moorei Paints	X Jackson Hewitt Tax Service X Kensies ResSale	Electra Vapor X Shaw Real Estate						
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EIS RELOCATION REPORT

North Carolina Department of Transportation RELOCATION ASSISTANCE PROGRAM

⊠ E.I.S.	S. CORRIDOR DESIGN																	
WBS ELEM	IENT: 40)191.1.2	COUNTY	New Har	nover/Pe	nder	Alterna	te	EH d	of	Alte	rnate						
T.I.P. No.:	R-3300																	
DESCRIPTIO	N OF PROJ	JECT: Pro	posed U	S 17 Ham	npstead Bypass													
	ESTIMA	TED DISPLA	CEES		INCOME LEVEL													
Type of Displacees	Owners	Tenants	Total	Minorities	0-15M		15-25M	35-50	35-50M 50 UP									
Residential	34	5	39	2 .	0	_	3		8-35M	9 [18						
Businesses	11	13	24	0	<u> </u>	UE OF	DWELLING	<u> </u>		-	G AVAILAE							
Farms	1	0	1	0	Owners	•	Tenan	ts	For	Sale	For R	Rent						
Non-Profit	0	1	1	0	0-20м	0	\$ 0-150	0	0-20м	0	\$ 0-150	0						
	ANSWE	R ALL QUEST	IONS		20-40M	0	150-250	0	20-40м	0	150-250	0						
Yes No	Explain all	"YES" answ	ers.		40-70м	9	250-400	0	40-70M	9	250-400	0						
X	1. Will sp	ecial relocatio	n services be	necessary?	70-100м	3 🤛	400-600	0	70-100M	34	400-600	0						
X	2. Will so	chools or chur	ches be affe	cted by	100 UP	22	600 UP	5	100 UP	491	600 UP	34						
A Secretary of the second seco	displac	cement?			TOTAL	34	for the good for the second se	5		534		34						
Х	3. Will bu	usiness servic	es still be av	ailable	REMARKS (Respond by Number)													
		roject?			2) Peoples Baptist Church in proposed R/W													
X		ny business b	•		Business Services will remain available as much of the project area is commercial/industrial													
		te size, type,		mber of														
		yees, minoriti			'		attached s					es .						
X		location caus	=	-	a '		Housing sl											
	Multipl	e for available le listing Serv et searches.			warranted, Last Resort housing will be applied in accordance with the Uniform Relocation Act.													
X		dditional hous	ing programs	s be	11) Public housing is available through local agencies.													
X	8. Should consid	d Last Resort lered?	Housing be		12) Based on the availability of DSS housing available on the market, it is not felt there will be a shortage of DSS housing													
X	9. Are the	ere large, disa	abled, elderly	, etc.	* Any deficiency in housing not within financial means will													
gar aga Alesa ya 1000 aga Alamo ya A	familie	s?			be addressed within the guidelines of the Last Resort Housing													
X	10. Will pub	blic housing b	e needed for	project?	Section of the Uniform Act.													
Х	11. Is publi	ic housing ava	ailable?		14) Based on local survey and current real estate listings													
		there will be	-	-	suitable business sites will be available.													
		ıg available d	-	-														
		ere be a probl	em of housin	g within			E: Carolina		_		_							
		ial means?					412 respec	•	•									
, , ,		table busines `	s sites availa	ıble (list			nstitutes a											
	source	,	matad ta aan	anlota			ese number					ntial						
	15. Numbe RELOCA	r months esti	o 24 Month				nt, but they ugh they ar					IIIIai						
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NOTE: o bill																		
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Right	of Way Ager	nt	D	ate	i	2068	Relocation C		dan		Date							

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HQY.		Veterinarian	Electric Supply/Electricians	EMS services	Outdoor Advertising Con same parcel as above	Glass Sales/Service	Self:Storage (7 Units)	Distribution center	TOO Hand Dio	Taxi Service	Eleginical service	\mathcal{O}	Child called	Furniture Sales (Following 2 are same location		Same as above *	Ecigarette Sales	Nail Salon	Restaurant	Salon/Spa	Recycling and waste collection center	yacht builder	Ministorage (Site contains 412) Units	Outdoor Advertising	27. 1867.15	Nursery				1				
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NAME	Peoples Baptist @furefi	Sunflower Vet Clinic	Tri County Electric	Pender EMS	13.		Carolina Storage	Noelle Enterprises	Atlantic Tool and Die	Hampstead Taxi		Fairway Billboard	Kids Görner Learning Center	Classic and Casual Furniture	Hometown Vintage Furniture	Mattress	Vaporizite	Hampstead Nail Envy		Images Salon and Spa		Caison Yachts	~			Cypress Pond Nursery				14 Grant III Owner II Farm a second III III III II II II II II II II II II	n in ite to a reserve to the market the second of the seco	F=FUITING	P=part Time	M=Minodic/
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APPENDIX F

LIST OF REFERENCES

REFERENCES

AccessNC. Pender County Custom Derived Report, Employment and Occupation. Accessed March 14, 2014. http://accessnc.commerce.state.nc.us/EDIS/demographics.html.

Amoroso, J.L. 2002. Natural Heritage Program List of the Rare Plant Species of North Carolina. North Carolina Natural Heritage Program. Raleigh.

City of Wilmington. www.wilmingtonnc.gov.

City of Wilmington. Cape Fear Regional Household Travel Survey, Final Report 2003.

City of Wilmington. August 2004. Choices, The Wilmington Future Land Use Plan, 2004-2025.

City of Wilmington. November 2004. Market Street Corridor Plan.

City of Wilmington. 2005. Roadway Corridor Official Map of Military Cutoff Road Extension from Gordon Road to I-140.

City of Wilmington and New Hanover County. May 8, 2006. Wilmington-New Hanover County Joint Coastal Area Management Plan 2006 Update.

City of Wilmington. January 2007. City of Wilmington 20-Year Transportation Needs.

City of Wilmington. Code of Ordinances. www.municode.com/resources/gateway.asp.

City of Wilmington. Land Development Code. www.ci.wilmington.nc.us/Departments/DevelopmentServices/Planning/LandDevelopmentCode.

Coastal Carolina Research. 2013. Archaeological Survey and Evaluation of the Proposed Military Cutoff Road Extension and US 17 Hampstead Bypass, New and Pender Counties, North Carolina (NCDOT TIP # U-4751 and R-3300; ER 05-2123).

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. US Fish and Wildlife Service. US Government Printing Office, Washington D.C.

Dr. J.H. Carter III & Associates, Inc. December 21, 2012. Summary of red-cockaded woodpecker foraging habitat analyses from latest design file for US Highway 17 Bypass of Hampstead (R-3300), Pender County, North Carolina.

Environmental Data Resources (EDR) Inc., EDR DataMap Environmental Atlas. October 18, 2006. US 17 Corridor Study (TIP Proj No U-4751 + R-3300) Pender, NC. Inquiry number 01776198.1r Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, US Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.

Federal Highway Administration. September 1996. Community Impact Assessment, A Quick Reference for Transportation.

Federal Highway Administration. October 1997. Title Code 23 of Federal Regulations Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise (23 CFR 772).

Hampstead Chamber of Commerce. www.hampsteadchamber.com.

Kimley-Horn and Associates, Inc. July 2010. Market Street Corridor Study, Final Report.

LeGrand Jr., H.E. and S.P. Hall. 2001. Natural Heritage Program List of the Rare Animal Species of North Carolina. North Carolina Natural Heritage Program. Raleigh.

Log In North Carolina. Economic Census Data. www.data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

Martin, Alexiou, Bryson and Hayes Planning Associates. March 2008. Wave Transit Satellite Transfer Stations.

Mattson, Alexander and Associates, Inc. August 2010. Historic Architectural Resources Survey Report. Military Cutoff Road and Hampstead Bypass. New Hanover and Pender Counties. NCDOT TIP Nos. U-4751/R-3300.

McKim & Creed. July 2006. Pender County Water Master Plan.

Mulkey Engineers and Consultants. May 1, 2012. Addendum and Revisions to the February 8, 2012 Evaluation of Impacts to Public Water Supply Groundwater Wells, US 17 Corridor Study, NCDOT TIP Project U-4751 & R-3300, Pender and New Hanover Counties.

Mulkey Engineers and Consultants. June 14, 2012. Avoidance and Minimization, Proposed SR 1409 (Military Cutoff Road) Extension, New Hanover County. State Project 40191.1.2, NCDOT TIP Project U-4751, Corps Action ID 2007 1386.

Mulkey Engineers and Consultants. February 20, 2013. Avoidance and Minimization, Proposed US 17 Hampstead Bypass, New Hanover and Pender Counties. State Project 40191.1.2, NCDOT TIP Project R-3300, Corps Action ID 2007 1386.

Mulkey Engineers and Consultants. May 26 and 27, 2010. Bridge and Alignment Review. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants. April 20, 2010. Bridge and Alignment Review. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants. July 8, 2013. Cape Fear Public Utility Authority Water Supply Wells Meeting Minutes. New Hanover County. TIP U-4751 – Proposed SR 1409 (Military Cutoff Road) Extension.

Mulkey Engineers and Consultants. January 2007. Corridor Alternatives Screening. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants. July 2011. Draft Environmental Impact Statement. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants. February 8, 2012. Evaluation of Impacts to Public Water Supply Groundwater Wells, US 17 Corridor Study, NCDOT TIP Project U-4751 & R-3300, New Hanover and Pender Counties.

Mulkey Engineers and Consultants. May 2007. Evaluation of Preliminary Alternatives. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants. May 29, 2013. Follow up to R-3300 Merger Concurrence Point 4A Meeting; Comparison of Impacts for Concurrence Point 3 Detailed Study Alternative with Option 6TR.

Mulkey Engineers and Consultants. September 2013. Indirect and Cumulative Effects Screening Report and Land Use Scenario Assessment. State Project 40191.1.2. Proposed SR 1409 (Military Cutoff Road) Extension and Proposed US 17 Hampstead Bypass. TIP Projects U-4751 and R-3300.

Mulkey Engineers and Consultants. May 17, 2012. Least Environmentally Damaging Practicable Alternative, Proposed SR 1409 (Military Cutoff Road) Extension and Proposed US 17 Hampstead Bypass, New Hanover and Pender Counties. State Project 40191.1.2, NCDOT TIP Projects U-4751 and R-3300, Corps Action ID 2007 1386.

Mulkey Engineers and Consultants. August 2010. Natural Resources Technical Report. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants. December 2008. Natural Resources Technical Report. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants. October 2013. Natural Resources Technical Memo. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants. September 2012. Natural Resources Technical Memo. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants. January 19, 2012. Post Hearing Meeting Minutes. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants. January 7, 2013. Post Hearing Meeting Minutes. New Hanover County. TIP U-4751 – Proposed SR 1409 (Military Cutoff Road) Extension.

Mulkey Engineers and Consultants. January 2009. Preliminary Hydraulics Study for Environmental Impact. New Hanover and Pender Counties. TIP Project No. U-4751 and R-3300, Hampstead Bypass and Military Cutoff Road Extension.

Mulkey Engineers and Consultants. August 2006. Purpose and Need. New Hanover and Pender Counties. TIP Project No. U-4751 and R-3300. US 17 Corridor Study.

Mulkey Engineers and Consultants. August 2009. Red-Cockaded Woodpecker Foraging Habitat Analysis Report, TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Mulkey Engineers and Consultants and EcoScience Corporation. June 2009. Community Impact Assessment and Qualitative Indirect and Cumulative Effects Assessment. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Nelson\Nygaard Consulting Associates, Inc. June 2012. Cape Fear Public Transportation Authority, Wave Short-Range Transit Plan, Final Report.

New Hanover County Government. www.nhcgov.com.

New Hanover County, June 5, 2006. New Hanover County Flood Damage Prevention Ordinance.

New Hanover County, Planning Department. May 1978. Middle Sound/ Ogden...Future Directions.

New Hanover County, Planning Department. June 1989. Porters Neck...Facing the Future.

North Carolina Cooperative Extension Services. 2012 Income of North Carolina Timber Harvested and Delivered to Mills. Accessed March 14, 2014. www.ces.ncsu.edu/forestry/pdf/income12.pdf.

North Carolina Department of Agriculture and Consumer Services. Agricultural Statistics – Summary of Commodities by County. Accessed March 14, 2014. www.ncagr.gov/stats/codata/pender.pdf.

North Carolina Department of Environment and Natural Resources, Division of Coastal Management. 2008. CAMA Handbook for Development in Coastal North Carolina: Section 2. dcm2.enr.state.nc.us/handbook/section2.htm.

North Carolina Department of Environment and Natural Resources, Division of Environmental Health. 2010. Shellfish Sanitation and Recreational Water Quality. Shellfish Closure Maps by County. www.deh.enr.state.nc.us/shellfish/maps.htm.

North Carolina Department of Environment and Natural Resources, Division of Environment, Public Water Supply Section (PWSS), 20060901, Public Water Supply Water Sources, Including Ground Water and Surface Water Sources: NCDENR Division of Environmental Health, Public Water Supply Section, Raleigh, North Carolina. www.nconemap.com.

North Carolina Department of Environment and Natural Resources, Division of Land Resources Mining Program. Permitted Active and Inactive Mines in North Carolina. 2010. www.dlr.enr.state.nc.us/pages/miningprogram.html.

North Carolina Department of Environment and Natural Resources. June 2006. Chps. 3, 6, 8 revised March 2009. Erosion and Sediment Control Planning and Design.

North Carolina Department of Environment and Natural Resources, Division of Marine Fisheries. 2010. Fishery Nursery Areas. Maps 22, 26, and 27. www.ncfisheries.net/maps/FNA maps/index.html.

North Carolina Department of Environment and Natural Resources, Division of Marine Fisheries. 2008. Shellfish Growing Areas GIS Data Layer. Updated April 2008.

North Carolina Department of Environment and Natural Resources, Division of Water Resources. 2012. 2012 North Carolina 303(d) List – Category 5. http://portal.ncdenr.org/c/document_library/.

North Carolina Department of Environment and Natural Resources. 2005. Cape Fear River Basinwide Water Quality Plan. Division of Water Quality Basinwide Planning Program. h2o.enr.state.nc.us/basinwide/draftCPFApril2005.htm.

North Carolina Department of Environment and Natural Resources, Division of Water Quality. 2004. Basinwide Information Management System: Water Body Reports. <u>h2o.enr.state.nc.us/bims/Reports/reportsWB.html</u>.

North Carolina Department of Environment and Natural Resource, Division of Water Quality. 1999. Internal Guidance Manual - NC Division of Water Quality Stream Classification Method.

North Carolina Department of Environment and Natural Resources, Division of Water Quality. 1995. Guidance for Rating the Values of Wetlands in North Carolina. Fourth version.

North Carolina Department of Transportation. Draft 2013-2023 Program and Resource Plan.

North Carolina Department of Transportation. 2012-2018 State Transportation Improvement Program.

North Carolina Department of Transportation. 2009-2015 State Transportation Improvement Program.

North Carolina Department of Transportation. 2011-2020 Draft State Transportation Improvement Program.

North Carolina Department of Transportation, Division of Highways, Project Development and Environmental Analysis Unit, Natural Environment Section. August 9, 2012. Addendum Red-Cockaded Woodpecker Foraging Habitat Analyses Report, US Highway 17 Hampstead Bypass Project, Pender County, North Carolina, T.I.P. Number R-3300.

North Carolina Department of Transportation, Transportation Planning Branch. July 2012. Draft Comprehensive Transportation Plan, Pender County.

North Carolina Department of Transportation, Geotechnical Engineering Unit. March 2009. Geotechnical Pre-Scoping Report. New Route from Military Cutoff to the Proposed Wilmington Bypass (R-2405) and US 17 Hampstead Bypass from US 17 to US 17 North of Hampstead.

North Carolina Department of Transportation, Natural Environment Section. Revised November 2012. NRTR Format Guidance.

North Carolina Department of Transportation, Quality Enhancement Unit, Value Management Services Group. December 22, 2011. R-3300 Value Engineering Report.

North Carolina Department of Transportation, Transportation Planning Branch. June 2008. Traffic Forecast for TIP Projects R-3300 & U-4751, New Hanover & Pender Counties.

North Carolina Department of Transportation. April 2008. Survey Report Red-Cockaded Woodpecker, TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

North Carolina Department of Transportation. January 2011. Red-Cockaded Woodpecker Foraging Habitat Analysis Report for US Highway 17 Bypass of Hampstead (R-3300).

North Carolina Department of Transportation. 2007. Invasive Exotic Plant List for North Carolina. Unpublished.

North Carolina Department of Transportation. June 2006. Travel Analysis Report for Military Cutoff Road Extension and Hampstead Bypass, TIP Nos. U-4751 and R-3300.

North Carolina Department of Transportation, Transportation Mobility and Safety Division, Traffic Safety Unit. 2009-2011 Three Year Crash Rates.

North Carolina Department of Transportation, Traffic Noise and Air Quality Group. March 17, 2011. Review of Revised Traffic Noise Technical Memorandum. US 17 Corridor Study.

North Carolina Department of Transportation. 2004. Feasibility Study, Military Cutoff Road Extension From Existing Military Cutoff Road (SR 1409) in Wilmington to Proposed TIP Project R-2405A (US 17 Wilmington Bypass).

North Carolina Department of Transportation. September 2, 2004. Strategic Highway Corridors Map.

North Carolina Department of Transportation. 2004. Strategic Highway Corridors. Concept Development Report.

North Carolina Department of Transportation. 2003. Best Management Practices for Construction and Maintenance Activities.

North Carolina Department of Transportation. 1999. Draft Feasibility Study, R-3300 US 17 Bypass, Pender County.

North Carolina Department of Transportation. 1997. Best Management Practices for Protection of Surface Waters.

North Carolina Department of Transportation, Division of Bicycle and Pedestrian Transportation, Bike Maps and Routes. www.ncdot.gov/travel/mappubs/bikemaps/default.html.

North Carolina Department of Transportation, Division of Highways, Relocation Assistance. www.ncdot.gov/download/construction/roadbuilt/RelocationBooklet_07.pdf.

North Carolina Employment Security Commission. <u>www.ncesc.com</u>.

North Carolina Museum of History. American Indians in North Carolina. www.ncmuseumofhistory.org/workshops/AI/TribalInfo.htm.

North Carolina Natural Heritage Program. 2000. Executive Summary, Natural Area Inventory of Pender County, North Carolina.

North Carolina Office of State Budget and Management. Socioeconomic Data. Multiple access dates. www.osbm.state.nc.us.

North Carolina Wildlife Resources Commission, Holly Shelter Game Land. www.ncwildlife.org.

Oliver, Christopher. July 2013. North Carolina Animal Related Crashes, 2010-2012 County Rankings and Crash Data. Traffic Safety Unit, Transportation Mobility and Safety Division, North Carolina Department of Transportation.

Pender County Government. www.pendercountync.gov.

Pender County. June 21, 2010. Pender County Comprehensive Land Use Plan.

Pender County. 2010. Pender County Comprehensive Parks and Recreation Master Plan.

Pender County. May 16, 2005. Pender County CAMA Land Use Plan 2005 Update.

Pender County Planning Department. 2005. Future Land Use Plan Map. <u>www.pender-county.com/documents/planning/Maps</u>.

Pender County. June 2, 1997. Thoroughfare Plan for Pender County.

Personal Communication, 2014a. Telephone correspondence with Mr. Milton Cortes, Natural Resources Conservation Service (NRCS), on February 10, 2014 regarding the NRCS change in farmland soils calculations and use of Urban Area.

Personal Communication, 2014b. Telephone correspondence with Mr. Mark Seitz, Director, Pender County Agricultural Extension Office, on March 14, 2014 regarding agricultural economy of Pender County.

Personal Communication, 2014c. E-mail correspondence with Mr. Kenton Kolbe, NCDOT Vegetation Management Section, on March 17, 2014 regarding best management practices for invasive species control.

Personal Communication, 2013a. E-mail correspondence with Mr. Bryan McCabe, Pender County Utilities, May, 2013 regarding preliminary design of northern interchange for R-3300 US 17 Hampstead Bypass in the area of Pender County water tank and solid waste facility.

Personal Communication, 2013b. E-mail correspondence with Mr. Kyle Breuer, Pender County Planning and Community Development, June 2013 regarding status of proposed developments in Pender County.

Personal Communication, 2013c. E-mail correspondence with Mr. Mike Kozlosky, City of Wilmington and Sam Burgess, New Hanover County Planning, June 2013 regarding status of proposed developments in New Hanover County.

Personal Communication, 2010a. E-mail correspondence with Mr. Kenneth E. Vafier, Pender County Planning and Community Development on October 6, 2010 regarding status of proposed developments in Pender County.

Personal Communication, 2010b. E-mail correspondence with Ms. Jane Daughtridge and Mr. Sam Burgess, New Hanover County Government, regarding status of proposed development activity near the proposed Military Cut-Off corridor.

Personal Communication, 2010c. Telephone correspondence with Mr. Dale Suiter, USFWS, on June 30, 2010 regarding golden sedge at Sidbury Road site.

Personal Communication, 2010d. E-mail correspondence with Mr. Gary Jordan, USFWS, on July 12, 2010 regarding golden sedge at Sidbury Road site.

Personal Communication, 2010e. E-mail correspondence with Mr. Travis Wilson, NCWRC, on August 5, 2010 regarding construction moratoria for inland waters.

Personal Communication, 2008a. Telephone correspondence with Mr. Dale Suiter, USFWS, on June 5, 2008 regarding abnormal blooming of endangered plant species.

Personal Communication, 2008b. Telephone correspondence with Mr. Fritz Rhode, NCDMF, on September 12, 2008 regarding NCDMF surface water designations and endangered species.

Personal Communication, 2008c. Telephone correspondence with Mr. Ron Sechler, NOAA Fisheries Service, on September 18, 2008 regarding NOAA protected essential fish habitat.

Personal Communication, 2008d. Telephone correspondence with Mr. Stephen Lane, NCDCM, on September 18, 2008 regarding CAMA areas of environmental concern.

Personal Communication, 2008e. E-mail correspondence with Mr. Gary McSmith, Cape Fear Public Utility Authority, on November 12, 2008 and telephone correspondence on October 8, 2010 regarding water treatment facility and infrastructure near Military Cutoff Road Extension alignment.

Personal Communication, 2008f. Telephone correspondence with Mr. Travis Wilson, NCWRC, on November 20, 2008 regarding construction moratoria for inland waters.

Radford, A.E., H.E. Ahles, and C.R. Bell. 1968. Manual of the Vascular Flora of the Carolinas. Chapel Hill: University of North Carolina Press. 1183 pp.

Rhode, F.C., R.G. Arndt, D.G. Lindquist, and J.F. Parnell. 1994. Freshwater Fishes of the Carolinas, Virginia, Maryland, and Delaware. Chapel Hill: University of North Carolina Press. 222 pp.

RS&H Architects, Engineers and Planners, Inc. September 24, 2012. U-4751/R-3300 – Military Cutoff Road Extension/Hampstead Bypass, Preferred Alternative Traffic Operations Analysis – 2035 Build Conditions RCW Alternatives 6R, 6T, 8A and 8.

RS&H Architects, Engineers and Planners, Inc. September 20, 2013. U-4751/R-3300 – Military Cutoff Road Extension/Hampstead Bypass, Preferred Alternative Traffic Operations Analysis – 2035 Build Conditions RCW Alternatives 6R, 6T, 8 and 6TR.

RS&H Architects, Engineers and Planners, Inc. March 2011. Traffic Operations Analysis Report, Volume 2, Build Conditions Analysis Final. New Hanover and Pender Counties. TIP Nos: U-4751 and R-3300. Military Cutoff Road Extension and Hampstead Bypass.

RS&H Architects, Engineers and Planners, Inc. August 2009. Traffic Operations Analysis Report, Volume 1, Existing and No-Build Conditions Analysis. New Hanover and Pender Counties. TIP Nos: U-4751 and R-3300. Military Cutoff Road Extension and Hampstead Bypass.

Schafale, M.P. and A.S. Weakley. 1990. Classification of the Natural Communities of North Carolina: Third Approximation. North Carolina Natural Heritage Program, Division of Parks and Recreation, NCDEHNR. Raleigh, North Carolina. 325 pp.

SEPI Engineering & Construction. February 2011. Traffic Noise Technical Memorandum. US 17 Corridor Study. New Hanover and Pender Counties. NCDOT TIP Nos. U-4751 and R-3300.

SEPI Engineering & Construction. July 2009. Air Quality Analysis Final. New Hanover and Pender Counties. TIP U-4751 and TIP R-3300 – US 17 Corridor Study.

Simon Resources, Inc. April 2007 U-4751 and R-3300 Citizens Informational Workshop Summary.

Smith, Cherri. 2008. Invasive Exotic Plants of North Carolina. North Carolina Department of Transportation.

Toole Design Group. 2009. Walk Wilmington: A Comprehensive Pedestrian Plan.

Topsail-Island Information. www.topsail-island.info/wordpress/index.php/hampstead.

Town of Hampstead, North Carolina. www.hampsteadchamber.com.

United States Census Bureau. Multiple access dates. www.census.gov.

United States Census Bureau. DP03. Selected Economic Characteristics. 2008-2012 5-Year Estimates. Accessed March 20, 2014. http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml.

United States Department of Agriculture, Natural Resources Conservation Service. August 2012. Farmland Protection Policy Act Manual. 440-V-CPM – Amendment 12, Subpart B, Section 523.10, Lands Covered by the Act.

United States Department of Agriculture, Natural Resources Conservation Service. 1998. Hydrologic Units-North Carolina (metadata). Raleigh, North Carolina.

United States Department of Agriculture, Natural Resources Conservation Service. 1990. Soil Survey of Pender County, North Carolina.

United States Department of Agriculture, Natural Resources Conservation Service. 1977. Soil Survey of New Hanover County, North Carolina.

United States Department of Agriculture, Natural Resources Conservation Service. www.soildatamart.nrcs.usda.gov.

United States Environmental Protection Agency. www.epa.gov/npdes/stormwater.

United States Fish and Wildlife Service. 2003. Recovery plan for the red-cockaded woodpecker (Picoides borealis): second revision.

United States Fish and Wildlife Service, Region 4: Southeast Region, North Carolina Ecological Services. 2009. Threatened and Endangered Species in North Carolina: New Hanover County. Updated December 26, 2012. www.fws.gov/nces/es/clisttext.html.

United States Fish and Wildlife Service, Region 4: Southeast Region, North Carolina Ecological Services. 2009. Threatened and Endangered Species in North Carolina: Pender County. Updated December 26, 2012. www.fws.gov/nc-es/es/clisttext.html.

United States Fish and Wildlife Service. 1999. National Wetland Inventory GIS Data Layer. Statewide, North Carolina. Updated 18 May 1999.

United States Geological Survey. 1970. Hampstead, North Carolina, Topographic Quadrangle (7.5-minute series). Reston, VA: 1 sheet.

United States Geological Survey. 1970. Mooretown, North Carolina, Topographic Quadrangle (7.5-minute series). Reston, VA: 1 sheet.

United States Geological Survey. 1970. Scotts Hill, North Carolina, Topographic Quadrangle (7.5-minute series). Reston, VA: 1 sheet.

United States Geological Survey. 1970. Topsail, North Carolina, Topographic Quadrangle (7.5-minute series). Reston, VA: 1 sheet.

United States Travel Association for the North Carolina Division of Tourism, Film and Sports Development. 2008 Economic Impact of Travel on North Carolina Counties.

Webster, W.D., J.F. Parnell, and W.C. Biggs. 1985. Mammals of the Carolinas, Virginia, and Maryland. Chapel Hill, University of North Carolina Press. 255 pp.

Weiss, Martin H. and Roger Figura. 2003. A Provisional Typology of Highway Economic Development Projects. Federal Highway Administration. www.fhwa.dot.gov.

Wilmington Urban Area Metropolitan Planning Organization. www.wmpo.org.

Wilmington Urban Area Metropolitan Planning Organization, Bicycle & Pedestrian Transportation. www.wmpo.org/WMBPC/index.html.

Wilmington Urban Area Metropolitan Planning Organization. December 2010. Cape Fear Commutes 2035 Transportation Plan, Final Report.

Wilmington Urban Area Metropolitan Planning Organization. 2009. City of Wilmington Cross-City Trail.

Wilmington Urban Area Metropolitan Planning Organization. May 21, 2007. Coastal Pender Collector Street Plan.

Wilmington Urban Area Metropolitan Planning Organization. January 2013. Comprehensive Greenway Plan, Wilmington/New Hanover County.

Wilmington Urban Area Metropolitan Planning Organization. 2006. Greater Wilmington Urban Area Thoroughfare Plan.

Wilmington Urban Area Metropolitan Planning Organization. November, 2011. Transportation Corridor Official Map Project R-3300 Hampstead Bypass. New Hanover and Pender Counties. www.wmpo.org/projects.html.

Wilmington Urban Area Metropolitan Planning Organization. Transportation Improvement Program 2004 – 2010.

Wilmington Urban Area Metropolitan Planning Organization. Transportation Improvement Program 2007 – 2013.

Wilmington Urban Area Metropolitan Planning Organization. March 2012. US 17/NC 210 Corridor Study.

Wilmington Urban Area Metropolitan Planning Organization. 2005. Wilmington Urban Area 2030 Long-Range Transportation Plan. www.wmpo.org/LRTP.htm.

Wilmington Urban Area Metropolitan Planning Organization. March 2007. Wilmington, North Carolina Metropolitan Area Bicycle Map.

Wilmington Urban Area Metropolitan Planning Organization. May 2012. Wilmington Metropolitan Area Bicycle Map.

Wilmington Urban Area Metropolitan Planning Organization. February 2008. WMPO BikePed Committee Bicycle Routes Map.